











INTERNATIONAL INSTITUTE OF AGRICULTURE  
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

---

MONTHLY BULLETIN  
OF ECONOMIC AND SOCIAL  
INTELLIGENCE \* \* \* \*

---

49<sup>th</sup>. VOLUME \* \* \* \*

---

VI<sup>th</sup>. YEAR—NUMBER 1

---

\* \* \* JANUARY 1915

---



---

\* \* \* ROME, PRINTING OFFICE OF THE INSTITUTE, 1915 \* \* \*



## THE INTERNATIONAL INSTITUTE OF AGRICULTURE.

---

The International Institute of Agriculture was established under the International Treaty of June 7th., 1905, which was ratified by 40 Governments. Fifteen other Governments have since adhered to the Institute.

It is a Government Institution in which each Country is represented by delegates. The Institute is composed of a General Assembly and a Permanent Committee.

The Institute, confining its operations within an international sphere, shall:

(a) Collect, study, and publish as promptly as possible, statistical, technical, or economic information concerning farming, vegetable and animal products, the commerce in agricultural products, and the prices prevailing in the various markets.

(b) Communicate to parties interested, also as promptly as possible, the above information.

(c) Indicate the wages paid for farm work.

(d) Make known new diseases of plants which may appear in any part of the world, showing the territories infected, the progress of the diseases, and, if possible, the remedies which are effective.

(e) Study questions concerning agricultural co-operation, insurance and credit in all their aspects; collect and publish information which might be useful in the various countries for the organisation of work connected with agricultural co-operation, insurance and credit.

(f) Submit to the approval of the Governments, if there is occasion for it, measures for the protection of the common interests of farmers and for the improvement of their condition, after having utilized all the necessary sources of information, such as the wishes expressed by international or other agricultural congresses, or by congresses of sciences applied to agriculture or agricultural societies, academies, learned bodies, etc.



# PERMANENT COMMITTEE OF THE INTERNATIONAL INSTITUTE OF AGRICULTURE

*President : Marquis RAFFAELE CAPELLI, Delegate of Italy.*

*Vice-President : M. LOUIS-DOP, Delegate of France.*

*List of the Delegates of the Permanent Committee :*

1	GERMANY .....	I	Dr. T. MUELLER, Privy Councillor.
2	ARGENTINE REPUBLIC .....	I	Dr. OCTAVIO PIÑEIRO SORONDO.
3	AUSTRIA .....	I	Chev. V. DE POZZI, Government Councillor.
4	HUNGARY .....	I	E. DE MIKLOS, Sect. of State, Member of House of Magnates.
5	BELGIUM .....	IV	O. BOLLE.
6	BRAZIL .....	I	ANTONINO FIALHO, Ex Deputy.
7	BULGARIA .....	III	D. RIDOFF, Minister Plenipotentiary.
8	CHILE .....	I	S. ALDONATE, Minister Plenipotentiary.
9	CHINA .....	I	M. OUEZKING, Secretary to the Legation of China.
10	COLOMBIA .....	I	
11	COSTA-RICA .....	V	R. MONTEALEGRE, Minister Plenipotentiary.
12	CUBA .....	V	M. A. MARTIN RIVERO, Minister Plenipotentiary.
13	DENMARK .....	IV	A. DE OLDENBURG, Charge d'affaires.
14	OTTOMAN EMPIRE .....	I	Dr. MOHAMMED DJEMH, Rev.
15	EGYPT .....	II	B. CHIMMERI, Senator, Delegate of Britain.
16	ECUADOR .....	V	
17	SPAIN .....	I	ENRIQUE RODRIGUEZ DE CELIS, Agricultural Engineer.
18	UNITED STATES .....	I	DAVID LUBIN.
19	ARABIA .....	I	Prof. G. CERONI, Director, Station of Plant Pathology, Rome.
20	FRANCE .....	I	LOUIS-DOP, Vice-president of the Institute.
21	ALGERIA .....	V	LOUIS-DOP.
22	MOROCCO .....	V	LOUIS-DOP.
23	TUNIS .....	V	LOUIS-DOP.
24	GT. BRITAIN & IRELAND .....	I	SIR JAMES WILSON, K. C. S. I.
25	AUSTRALIA .....	IV	SIR JAMES WILSON, K. C. S. I.
26	CANADA .....	II	SIR JAMES WILSON, K. C. S. I.
27	BRITISH INDIA .....	II	SIR EDWARD BUCK, K. C. S. I.
28	NEW ZEALAND .....	IV	SIR JAMES WILSON, K. C. S. I.
29	MAURITIUS .....	V	SIR JAMES WILSON, K. C. S. I.
30	UNION OF SOUTH AFRICA .....	IV	SIR JAMES WILSON, K. C. S. I.
31	GREECE .....	IV	D. CACLAMANOS, Charge d'affaires.
32	GUATEMALA .....	V	C. MONTELEONE, Consul General for Guatemala.
33	ITALY .....	I	Marquis R. CAPELLI, Deputy, President of the Institute.
34	ERITREA & IT. SOMAL .....	IV	B. CHIMMERI, Senator.
35	TRIPOLI AND CIRENAICA .....	IV	B. CHIMMERI.
36	JAPAN .....	I	BARON OTORI, Attaché to the Embassy.
37	LUXEMBURG .....	V	O. BOLLE, Delegate of Belgium.
38	MEXICO .....	III	G. A. ESTEVA, Minister Plenipotentiary.
39	MONTENEGRO .....	V	G. VOLPI, Minister Plenipotentiary.
40	NICARAGUA .....	V	V. E. BLANCHI, Consul General.
41	NORWAY .....	IV	Dr. A. FJELSTAD, Counsellor to the Agricultural Department.
42	PARAGUAY .....	V	Prof. ORAZIO COMES, Director Portici Agr. College.
43	NETHERLANDS .....	IV	BARON W. B. R. de WELDEREN RENGENS, Minister Plenip.
44	DUTCH EAST INDIES .....	IV	BARON W. B. R. de WELDEREN RENGENS.
45	PERU .....	V	LOUIS-DOP, Delegate of France.
46	PERSIA .....	IV	A. DEL GALLO, Marquis of ROCCAGIOVINE.
47	PORTUGAL .....	IV	EUSEBIO LEAO, Minister Plenipotentiary.
48	ROUMANIA .....	I	DEMETRIUS C. PENNESCO, Counsellor to the Legation.
49	RUSSIA .....	I	His Excell. G. ZARFELD, Consul General for Russia.
50	SALVADOR .....	V	A. BLANCHI CAGLIESTI, Vice-Consul.
51	SAN MARINO .....	V	His Excell. L. LUZZATTI, Minister of State.
52	SERBIA .....	III	C. SCOTTI, Consul General for Serbia.
53	SWEDEN .....	IV	BARON C. N. D. DE BILDT, Minister Plenipotentiary.
54	SWITZERLAND .....	IV	
55	URUGUAY .....	V	Dr. E. ROVIRA, Vice-Consul.

Prof. GIOVANNI LORENZONI, General Secretary.

## STAFF OF THE BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE.

*Chief of the Bureau : Prof. GIOVANNI LORENZONI, LL. D., General Secretary.*

*Redactors en chef : 1. J. K. MONTGOMERY, M. A., B. Sc. - M. BEAUFRETON, advocate.*

*Relateurs : 1. J. L. ALCAZAR, LL. D. - 2. H. BIAUDET, Doctor in Literature. - 3. E. CAUDA, Doctor in Mathematics. - 4. O. H. COOKE, M. A., B. C. L., Barrister-at-Law. - 5. G. COSTANZO, LL. D. - 6. W. W. ELLIOTT, B. A. - 7. D. MEHRENS, D. Econ. Sc. - 8. L. REDAELLI, LL. D. - 9. G. SAGOT, Licentiate in Law. - 10. A. SANDONÀ LL. D.*

*Translators : 1. J. FARIAS, Advocate. - 1. R. JACQUEMIN, Licentiate in Literature and Philosophy (Rédacteur) - 3. W. P. WATERMEYER, B. A. - 4. T. BALDASANO, LL. D.*

# CONTENTS

## PART I : CO-OPERATION AND ASSOCIATION.

### GERMANY.

DISTRIBUTIVE CO-OPERATIVE SOCIETIES IN GERMANY . . . . .	Page	1
§ 1. Distributive Co-operative Societies in Germany on January 1st., 1914, page 1.		
— § 2. The Central Federation of German Distributive Co-operative Societies, page 5. — § 3. The Direct Purchases of the German Distributive Co-operative Societies and of the German Wholesale Purchase Society from the Agricultural Co-operative Societies and from Farmers in 1904 and 1912, page 9.		

### AUSTRALIA.

AGRICULTURAL CO-OPERATION IN SOUTH AUSTRALIA, by T. E. YELLAND, <i>Secretary to the South Australian Farmers' Co-operative Union, Ltd.</i> . . . . .	Page	12
Introduction, page 12. — § 1. The South Australian Farmers' Co-operative Union, page 13. — § 2. The Eudunda Farmers' Co-operative Union, page 17. — § 3. Co-operative Dairying and Fruit-Drying, page 18. — Conclusion, page 19.		

### UNITED STATES.

MISCELLANEOUS NEWS . . . . .	Page	20
1. The California Fruit Growers' Exchange, page 20. — 2. The California Associated Raisin Company, page 21. — 3. The Forty-Eighth Annual Session of the National Grange, page 23. — 4. Louisiana Swine Breeders' Association, page 25.		

NOTICES OF SOME RECENT PUBLICATIONS RELATING TO CO-OPERATION AND ASSOCIATION . . . . .	Page	27
--	------	----

## PART II: INSURANCE AND THRIFT.

### BELGIUM.

BELGIAN UNEMPLOYMENT BENEFIT SOCIETIES. . . . .	Page 33
§ 1. Unemployment Benefit Societies of the Labourers' Organizations, page 34. —	
§ 2. Subventions from the Communal Authorities: Unemployment Funds, page 36. — § 3. The Labour Exchanges, page 37. — § 4. "Maisons du Travail" and other Remedies for Unemployment, page 39. — § 5. International Association on Unemployment, page 49.	

### SWEDEN.

THE CO-OPERATIVE INSURANCE OF PIGS IN SWEDEN by H. JUHLIN DANNEFELT, <i>Secretary of the Royal Academy of Agriculture</i> . . . . .	Page 42
NOTICES OF SOME RECENT PUBLICATIONS RELATING TO INSURANCE . . . . .	Page 46

## PART III: CREDIT.

### GERMANY.

LANDSCHAFT OF THE PROVINCE OF SAXONY . . . . .	Page 47
§ 1. Historical Observations, page 47. — § 2. Rules of the "Landschaftlicher Kreditverband", page 50. — § 3. The Development of the Kreditverband, page 51. — § 4. The Present Position, page 58.	

### ITALY.

1. — THE NEW PROVISIONS IN REGARD TO AGRICULTURAL CREDIT IN ITALY . . . . .	Page 63
2. — MISCELLANEOUS INFORMATION . . . . .	Page 65
1. The Balance Sheets of the Ordinary Savings Banks, page 65. — The New Savings Banks Books to Beurer, page 67.	
NOTICES OF SOME RECENT PUBLICATIONS RELATING TO CREDIT . . . . .	Page 70

## PART IV: MISCELLANEOUS.

## BELGIUM.

THE LAND SYSTEM, AGRICULTURAL LABOUR AND CONTRACTS IN THE BELGIAN CONGO. . . . .	Page 71
§ 1. The Legal Classification of Land, page 72. — § 2. The Principal Rules Regulating the Gathering of Plant Products on Crown Lands, page 75. — § 3. Conditions for the Sale and Lease of Crown Lands, page 76. — § 4. The Labour Question and Labour Contracts, page 78.	

## BULGARIA.

DISTRIBUTION OF LAND ACCORDING TO CROPS AND TENURE . . . . .	Page 83
§ 1. General Features, page 84. — § 2. The Agricultural Population, page 88. — § 3. Division of Land according to Crops, page 90. — § 4. General Distribution of Landed Property, page 91. — § 5. Private Landed Property in Bulgaria, Area, Division and Readjustment of Farms. Conclusion, page 98.	

## BRITISH INDIA.

CANAL COLONIES IN THE PANJAB, by Sir JAMES DONIE, K. C. S. I. . . . .	Page 102
§ 1. Agricultural Conditions in the Panjab, page 102. — § 2. Irrigation and Colonization, page 104. — § 3. The Five Great Perennial Canals, page 105. — § 4. The Principles of Canal Colonization, page 106. — § 5. The First Experiments in Colonization, page 108. — § 6. The Lower Chenab Canal Colonization Scheme, page 108. — § 7. The Lower Jhelam Canal Colonisation Scheme, page 114. — § 8. The Lower Bari Doab Colonization Scheme, page 117. — § 9. The Value of Colony Land, page 119.	

## UNITED STATES.

MISCELLANEOUS INFORMATION . . . . .	Page 121
1. Some Attempts to Utilise Surplus Town Labour in Agriculture, page 121. — 2. Bankers' Committees in Agricultural Development and Education, page 123. 3. Farm Tenure in Texas, page 124. — 4. The Relative Growth of the Negro Population, page 125.	

NOTICES OF SOME RECENT PUBLICATIONS RELATING TO AGRICULTURAL ECONOMY IN GENERAL . . . . .	Page 127
---	----------



## Part I: Co-operation and Association

---

### GERMANY.

#### DISTRIBUTIVE CO-OPERATIVE SOCIETIES IN GERMANY.

##### SOURCES :

JAHRESBERICHT DES ZENTRALVERBANDES DEUTSCHER KONSUMVEREINE FÜR 1913 (*Annual Report of the Central Federation of the Distributive Co-operative Societies of Germany, for 1913*). Hamburg, 1914.

##### § 1. DISTRIBUTIVE CO-OPERATIVE SOCIETIES IN GERMANY ON JANUARY 1ST., 1914.

Generally speaking, the usefulness of the Distributive Co-operative Societies in a country does not so much depend upon the number of such societies, as upon the number of members and the diligent use that the latter make of the services of the societies. It is manifest that members who only figure on paper are of little use.

The number of co-operative societies of new creation in Germany has tended to decrease since 1913 (Table I). This is due to the tendency towards concentration, which is also encouraged by the formation of district co-operative societies on the part of the Central Federation of the German Distributive Co-operative Societies. Concentration is of advantage in competition with private trade which tends to establish warehouses with branch establishments, and, further, it permits of increased production on the part of the co-operative societies and serves to prevent

# GERMANY - CO-OPERATION AND ASSOCIATION

the rise of weak organisations. This explains the decrease in the number of societies founded, the increase in the number dissolved and, in fine, the inevitable diminution of the number of societies.

TABLE I. — *Number of Co-operative Societies.*

Year	Societies Founded	Societies Dissolved	Societies Existing
1903 . . . . .	178	31	1,904
1904 . . . . .	143	47	2,090
1905 . . . . .	126	57	1,922
1906 . . . . .	137	52	2,007
1907 . . . . .	154	50	2,110
1908 . . . . .	155	43	2,222
1909 . . . . .	111	63	2,270
1910 . . . . .	117	76	2,311
1911 . . . . .	101	57	2,255
1912 . . . . .	92	53	2,394
1913 . . . . .	66	82	2,378

With regard to the *number of the members*, data are given in Table II for the period from 1903 to 1913. In the course of 1913, there was an increase of 137,384 in the number of the members of the Central Federations; thus it rose from 1,483,811 to 1,621,195.

The General Federation (which exists alongside of the Central Federation and also includes Distributive Co-operative Societies) showed an increase of 29,579 members in 1912. The increase in 1913 cannot have been much less. And allowing for the increase in the number of members of unfederated co-operative societies, the total increase of the members of German distributive co-operative societies may be estimated, in round numbers, at 200,000. Therefore the total number of the members of the German Distributive Co-operative Societies may have risen to 2,300,000, in round numbers, by January 1st., 1914.

# DISTRIBUTIVE CO-OPERATIVE SOCIETIES

TABLE II. — *Co-operative Societies adhering to Federations.*

Years (January 1st.)	Central Federation		General Federation		Total	
	No. of Affiliated Co-operative Societies	No. of Members	No. of Affiliated Co-operative Societies	No. of Members	No. of Affiliated Co-operative Societies	No. of Members
1903 . . . . .	585	480,916	242	390,721	927	781,637
1904 . . . . .	666	523,085	272	248,004	938	819,001
1905 . . . . .	715	646,175	272	255,916	1,017	902,091
1906 . . . . .	827	715,929	276	238,097	1,094	954,026
1907 . . . . .	900	776,999	274	246,945	1,174	1,023,944
1908 . . . . .	859	879,221	282	252,618	1,241	1,131,839
1909 . . . . .	1,028	966,904	278	257,682	1,306	1,223,986
1910 . . . . .	1,077	1,047,975	285	262,522	1,362	1,310,497
1911 . . . . .	1,109	1,171,763	290	270,437	1,399	1,442,200
1912 . . . . .	1,112	1,313,122	293	276,645	1,435	1,590,067
1913 . . . . .	1,155	1,483,811	290	306,224	1,445	1,790,035
1914 . . . . .	—	1,621,195	—	—	—	—

It may be interesting to consider the composition of the co-operative societies affiliated to the Central Federation in 1903 and 1913, according to the profession of the members, both in regard to the total numbers and the percentages for each class (Table III, A), and to compare the figures with those affiliated to the General Federation of Co-operative Societies for the same period (Table III, B). In the General Federation, there is a very much larger percentage of artisans and independent farmers, of persons engaged in the liberal professions, agricultural employees on wages and receiving salaries, and persons without any given profession, than in the Central Federation, in which industrial employees on wages or salaried predominate, while the independent farmers form but a small group. While a decreased percentage is observed in the General Federation in the case of these last, from 1910 to 1912 there was comparatively a slight increase in the Central Federation. This was due to the fact that the district distributive co-operative societies carried on a retail trade also in the country round about their head quarters. This makes it possible to anticipate an increased action on the part of the distributive co-operative societies among the agricultural population, even if the group of wage earning and salaried agricultural employers were to unite with the group of independent agriculturists to bring in the whole agricultural population interested in the distributive co-operative movement.



TABLE III. — *Distribution according to Profession of all the Member of the German Distributive Co-operative Societies.**(Total numbers and percentages).*

Year	Independent Artisans	Independent Farmers	Members of Liberal Professions, Employees of the State and Communes	Wage earning or Salaried Industrial Employees	Wage earning or Salaried Agricultural Employees	Profession not stated: Privates, students, Pensioners, etc.	Total	Men	Women
------	----------------------	---------------------	---	---	---	---	-------	-----	-------

(A) *Central Federation.*

1903	38,295 (7.7)	8,583 (1.7)	22,593 (4.5)	390,601 (78.3)	14,811 (3.0)	24,123 (4.8)	514,333 (100)	482,622 (93.6)	31,711 (6.4)
1913	84,760 (5.5)	52,202 (3.4)	52,202 (3.4)	1,220,530 (79.1)	37,552 (2.4)	119,576 (7.8)	1,306,646 (100)	1,306,646 (84.7)	238,851 (15.3)

(B) *General Federation.*

1903	20,520 (14.0)	6,861 (4.7)	36,756 (25.0)	62,226 (43.3)	8,895 (6.0)	11,816 (8.0)	140,982 (100)	129,330 (88.0)	17,652 (12.0)
1912	59,917 (21.2)	10,716 (3.8)	82,940 (29.3)	93,629 (33.1)	11,086 (3.9)	24,908 (8.8)	283,205 (100)	252,235 (89.1)	30,970 (10.90)

(1) In this group are also included: railway employees, dependent sailors, and servants.

(2) In addition: porters, and servants.

Table IV, finally, shows the general development of the German Distributive Co-operative Societies from 1904 to 1914, and shows in particular the increase in the *means* at the disposal of co-operation for its development.

TABLE IV. — *Situation of the Distributive Co-operative Societies in 1904 and 1914.*

Details	1904	1914	Increase per cent
Number of Members . . . . .	1,000,000	2,300,000	130.0
Total Business of the Society . . . . . M.	223,486,000	663,816,600	197.0
Production . . . . . "	21,312,000	112,803,500	429.3
Total Business of Distribution . . . . . "	24,103,000	46,484,200	92.9
Cash in Hand . . . . . "	3,233,000	5,860,200	81.3
Goods in Hand . . . . . "	28,936,000	74,476,600	157.1
Capital out at Interest . . . . . "	15,494,000	62,760,000	305.1
Personal Estate . . . . . "	4,937,000	18,256,100	268.2
Value of Real Estate . . . . . "	31,350,000	109,723,600	250.0
Members' Assets . . . . . "	19,487,000	42,864,800	120.0
Reserves of Every Kind . . . . . "	9,298,000	30,110,600	223.8
Loans Contracted and Savings Deposits . . . . . "	9,232,000	71,017,100	669.2
Mortgage Debts . . . . . "	16,028,000	51,032,600	218.4
Contributions of Members for the Office . . . . . "	2,244,000	7,413,000	230.3
Goods Debit . . . . . "	4,800,000	12,662,000	163.8
Credit of Members for Discount and Balance . . . . . "	23,061,000	58,562,400	153.9

## § 2. THE CENTRAL FEDERATION OF GERMAN DISTRIBUTIVE CO-OPERATIVE SOCIETIES.

### I. Organisation.

On January 1st., 1903, there were in Germany about 950,000 persons associated in distributive co-operative societies. Of these 480,960, or 51 per cent. belonged to the Central Federation. Of the 2,300,000 members registered with the distributive co-operative societies on January 1st., 1914, 1,621,195, or 70 per cent. belonged to the Central Federation, so that the proportion of the members of the latter association had increased by 19 per cent. between 1903 and 1914.

Gradually as it develops, the Central Federation adapts its internal organisation to new tasks. In the Extraordinary Co-operative Congress held at Hamburg on November 25th., 1914, the rules of the Federation, were revised, and its aims were defined as the reunion and organisation of every kind of German Distributive Co-operative Association, together with the protection of common interests by means of a union of forces and concerted measures.

The Central Federation is composed of 9 inspection federations (*Revisionsverbände*), of the Wholesale Purchase Society of the German Distributive Co-operative Societies Limited (*Grosseinkaufs-Gesellschaft Deutscher Konsumvereine m. b. H.*) which ranks as an inspection federation; in fact, the Central Federation includes all the co-operative societies affiliated to the inspection federations.

From 1913 only such consumers' co-operative societies may be affiliated to the inspection federations as on entering or leaving the federations implicitly enter or quit the Central Federation.

The contributions are in proportion to the importance of the business.

The Publishing Society of the German Distributive Co-operative Societies occupies a special position in regard to the Central Federation and is a limited liability society (*Verlagsgesellschaft deutscher Konsumvereine m. b. H.*). It is not a member of the Central Federation, but is attached to the same inasmuch as the Management of the latter is also that of the Publishing Society; the committee of the Central Federation is at the same time the supervision committee of the Publishing Society. All the co-operative societies of the Federation have to be members of the Publishing Society.

The executive authorities of the Central Federation are : the *Annual and Extraordinary Congresses of the Co-operative Societies* : the *General Council*, which meets twice a year, the *Committee* and the *Board of Management*.

The Inspection Federations have, as a rule, 3 executive authorities, viz., the *Annual and Extraordinary Congresses*, the *Supervision Committee* and the *Board of Management*.

The *Publishing Society* has also *Ordinary Annual Meetings*.

For purposes of collective purchase there are in the different districts purchasing unions (*Einkaufsvereinigungen*) corresponding with the inspection federations. The heads of these unions are annually called together by the Wholesale Purchase Society to consider questions dealing with collective purchase. In special relation with the Central Federation there are : the *Mutual Aid Society of the Central Federation of the German Distributive Co-operative Societies* for the employees and workmen of the federated co-operative societies, the number of the members of which rose in 1913 to 8,314; the *Tariff Office*, the *Examining Committee*, the *Professional Committee*, etc.

## 2. *The Work of the Central Federation and the Institutions Connected therewith.*

In the preparation of the statistics of the economic results attained by the Central Federation and the Co-operative Institutions, a different group has to be taken into consideration. Thus we must consider separately : (a) the distributive co-operative societies ; (b) the labour co-operative societies and co-operative societies with other objects ; (c) the Wholesale Purchase Society ; (d) the Publishing Society. It is the two groups a and b that are subdivided into the 9 inspection federations.

The totals given in Table V show the economic strength of the Central Federation. From 1912 to 1913, there was observed a decrease in the number of the affiliated co-operative societies, while that of those co-operative societies which furnished data remained the same. The members increased in number during the period in question, but it is to be noted that while those of the distributive, labour and miscellaneous societies are almost without exception single individuals, those of the Society for Wholesale Purchase and the Publishing Society are co-operative societies. The number of shops and warehouses also increased between 1912 and 1913.

TABLE V. — *Situation of the Central Federation.*

Organisations	Affiliated Co-operative Societies	Co-operative Societies Furnishing Data	Number of Members at Close of Financial Year	Number of Shops	Number of Central Warehouses
Distributive Co-operative Societies . . . . .	1,157	1,129	1,621,195	4,881	227
Labour and other Co-operative Societies . . . . .	38	38	11,085	—	—
Wholesale Purchase Society . . . . .	1	1	807	—	7
Publishing Society . . . . .	1	1	557	1	2
Total at End of 1913 . . . . .	1,197	1,169	1,633,644	4,882	236
" " " 1912 . . . . .	1,200	1,169	1,495,501	4,411	214

The share of the organisations in the wholesale co-operative purchase shown in Table VI.

TABLE VI. — *Wholesale co-operative purchases and sale of goods directly produced.*

Organisations	Foundation Capital Subscribed in the Wholesale Purchase Society	Capital Subscribed in the Production Branch of the Wholesale Purchase Society	Goods Business Done in the Wholesale Purchase Society	Banking Branch of the Wholesale Purchase Society		Results of Sale of Own Produce
	M.	M.	M.	Deposits With- drawable at 3 or more Months' Notice	Current Account Transac- tions	
Distributive Co-operative Societies . . . . .	3,871,108	372,662	136,242,337	16,899,667	152,953,436	99,577,623
Labour and other Co-operative Societies . . . . .	16,300	—	1,317,371	—	1,064,521	10,659,839
Wholesale Purchase Society . . . . .	—	—	—	—	200,496,408	11,076,573
Publishing Society . . . . .	1,000	—	169,000	1,497,826	13,891,000	3,410,477
Total at Close of 1913 . . . . .	3,888,608	372,662	137,788,708	18,397,493	368,407,365	129,024,564
" " " 1912 . . . . .	1,829,706	279,474	112,161,778	15,180,170	271,563,504	103,936,053

The number of persons occupied in the goods division increased in 1913 from 20,119 to 22,727; and those engaged in the preparation of the goods from 6,283 to 6,549. The total number of persons employed rose from 26,402 to 29,276.

The proceeds of private sales effected by the four groups of federations increased from 571,000,000 marks to 640,000,000 marks, while the value distributed increased from 31,800,000 marks, to 33,500,000 marks.

The gross business increased from 603,000,000 marks to 674,000,000 marks, while the gross receipts increased from 84,000,000 marks to 91,000,000 marks. The net surplus increased from 25,900,000 marks to 26,700,000 marks.

From the returns made in 1913, we see that the income of the Federations had risen to 192,854.78 marks. There is no prospect of any large increase for 1914 and 1915.

### 3. *The Wholesale Purchase Society.*

This is a central co-operative distributive production and thrift society of the German distributive co-operative societies. It is a limited liability association. It opens central warehouses in the different parts of the country. Commercial travellers are appointed for each district. It is not the society itself that produces, but its subordinate societies. The banking section occupies itself with the savings and the cash business of the distributive co-operative societies and serves as an intermediary and as a clearing house.

The Wholesale Purchase Society has a *Business Management* and *Supervision Committee* as well as *annual and extraordinary meetings*.

The work of the society is assisted by the purchase unions already mentioned.

In table VII are given some figures which will give an idea of the progress made by the society between 1894 and 1913.

TABLE VII. — *Progress of the Wholesale Purchase Society.*

Year	Number of Societies	Number of Members	Total Business Done	Value of Goods Produced by the Societies	Goods	Furniture and Machinery	Real Estate	Over Capital of the Societies and Deposits made by Members and Others
			M.	M.	M.	M.	M.	M.
1903 . .	265	197	26,445,889	—	921,512	81,585	395,570	1,739.1
1913 . .	807	2,017	154,047,316	11,076,579	7,292,153	722,026	7,416,647	41,008.8

§ 3. THE DIRECT PURCHASES OF THE GERMAN DISTRIBUTIVE CO-OPERATIVE SOCIETIES AND OF THE GERMAN WHOLESALE PURCHASE SOCIETY FROM THE AGRICULTURAL CO-OPERATIVE SOCIETIES AND FROM FARMERS IN 1904 AND 1912.

It is a fact worthy of notice that the on the part of the distributive co-operative societies there is a tendency to favour direct purchase from individual farmers rather than purchase through the agricultural co-operative societies. In 1904, as seen in Table VIII, the distributive co-operative societies purchased agricultural products to the value of 4,980,000 marks from the agricultural co-operative societies; while in 1912 the value of their purchases amounted to more than 8,000,000 marks, but, as the total business of the co-operative societies had increased from 147,000,000 marks to 423,000,000 marks, there was in reality a decrease of from 3.4 % to 1.9 % in the amount of direct purchase. From the farmers the co-operative societies purchased to the value of 2,500,000 marks, in 1904 and of 15,200,000 marks in 1912. There was then an absolute increase as well as an increase per cent of from 1.7 to 3.6.

Only the large proprietors produce goods in sufficient quantity to be able to offer them directly to the distributive co-operative societies or to the wholesale purchase society. Owners of small and medium sized holdings have to give their produce over to a middleman; they do not take it to or fetch it from the co-operative societies. The development of agricultural societies for production and sale alone could restrict the sphere of action of the middle-men. But even in such branches of agricultural activity where these societies have developed (dairy industry and vineyard cultivation) they represent but a small fraction of the production.

The Wholesale Purchase Society, on the other hand, can apply directly to the production and sale co-operative societies and offer their produce directly to the distributive co-operative societies, and thus they need not have immediate dealings with the farmers or the agricultural co-operative societies.

The purchases of the Wholesale Purchase Society from the co-operative societies were larger in 1912 (notwithstanding a diminution in comparison with 1904) than those from the farmers, and in this it presented a contrast with the distributive co-operative societies.

In 1913, the activity of the Wholesale Purchase Society increased notably. While in 1912 its agricultural produce business amounted to 8,800,000 marks, of which 1,700,000 marks was done with the agricultural co-operative societies of the country, 1,400,000 marks with foreign co-operative societies, 990,000 marks with farmers and 4,800,000 marks with the wholesale trade, in 1913 the total was 11,100,000 marks, of which 2,400,000 marks was done with agricultural co-operative societies

in Germany, 1,700,000 marks with foreign societies, 1,200,000 marks with farmers and 5,800,000 marks with the wholesale trade. Relatively it is with the wholesale trade its business has increased.

In general, the purchases made directly from the distributive co-operative societies belonging to the Federations, or through the medium of the Wholesale Purchase Society, vary in the case of certain products (butter, for example) of which the consumption is closely connected with the conditions of the workmen and these purchases are not large. They can, however, be considerably and systematically extended, especially where the trade is conducted on a large scale (cheese, eggs and potatoes). Where, on the other hand, production has to be promoted by establishing dairies, cheese factories, plantations and agricultural undertakings, rather than organising trade, a much slower rate of development is inevitable, and indeed advisable, in order that failures at the start may be supported and that sure progress may be made.

TABLE VIII.  $\Sigma$ . Direct Purchases from Agricultural Co-operative Societies and from Farmers.

Goods	Direct Purchases						of the German Wholesale Purchase Society		Total Direct Purchases		Proportion per cent of the Business of the Distributive Co-operative Societies	
	from the Agricultural Co-operative Societies		from Farmers		from the Agricultural Co-operative Societies		from Farmers		Distributive Co-operative Societies and of the Wholesale Purchase Society		1904	1912
	1904	1912	1904	1912	1904	1912	1904	1912	1904	1912		
Butter . . . .	4,514,640	4,042,053	406,919	3,058,311	—	—	—	—	7,176,134	10,530,403	4.9	2.5
Milk . . . . .	121,107	702,738	—	1,441,332	—	—	—	—	121,107	2,144,070	0.08	0.5
Cheese . . . .	22,840	354,659	47,042	841,014	—	40,194	—	615,024	69,882	1,850,931	0.05	0.4
Eggs . . . . .	62,156	919,817	6,457	695,544	—	—	—	—	68,613	1,615,361	0.05	0.4
Fruit and Preserves . .	7,083	23,160	2,400	237,198	57,100	17,207	—	—	66,583	277,865	0.05	0.07
Wine . . . . .	16,538	60,311	295,100	568,003	100	315	—	—	311,738	628,629	0.2	0.1
Potatoes . . . .	31,673	397,583	363,199	2,002,420	53,950	27,322	—	377,214	44,822	2,805,539	0.3	0.7
Cereals . . . .	158,883	577,638	439,899	1,374,068	2,800	—	—	—	601,582	1,951,706	0.4	0.5
Butchers' Beasts . .	36,815	17,000	691,826	3,971,862	—	—	—	—	728,641	3,988,862	0.5	0.0
Miscellaneous . .	11,242	119,294	262,879	122,777	5,563	—	—	—	279,684	242,971	0.2	0.05
Total . . . . .	4,982,977	8,114,553	2,515,721	15,212,529	2,374,088	1,715,077	—	992,278	9,872,786	26,034,437	6.7	6.1



## AUSTRALIA.

### AGRICULTURAL CO-OPERATION IN SOUTH AUSTRALIA.

By T. E. YELLAND

*Secretary to the South Australian Farmers' Co-operative Union, Ltd.*

#### INTRODUCTION.

Australia, with its large area, stretching for thousands of miles from north to south and from east to west, and with its vast and varied resources and its small population — only a little over four millions — does not lend itself to co-operation in the same way as the smaller countries of Europe with their large and closely settled populations; and when we also bear in mind that co-operation, particularly amongst the farmers, is only of recent growth, Australian farmers can regard with some pride the progress which they have made in the co-operative movement.

In dealing with Australia, one has to bear in mind that everything is on a larger scale than in the older countries, and that the best use has not yet been made of the agricultural soils of this land. Farms are large, varying in size from 1,000 to 5,000 acres, and often in some of the inferior districts much larger than this. This of course, refers to those farmers who confine their operations principally to wheat growing. The sheep-farmers and graziers in the interior of Australia count their land by thousands of square miles. The farms being large, co-operation of the type which existed in the earlier days of Australia is no longer possible.

Australian farmers have practically passed through one stage of co-operation and are now well advanced into the second. Both have been brought about by the necessity of the times. In the early days, with the old English ideas strong in their minds, the people selected small sections of land of not more than 80 acres, and with their small capital each purchased something towards working the farm, and then one lent to the other what the brother farmer did not possess. But as years went on, the fertility of the soil made many of these men independent. They

acquired larger properties, purchased the necessary machinery, and thus made the necessity for co-operation in its primary and simplest form a thing of the past; and whilst no farmer would object to assist another in this old fashioned way in case of necessity, each man at the present time is working independently and has a complete outfit on his usually large and up-to-date farm.

#### § I. THE SOUTH AUSTRALIAN FARMERS' CO-OPERATIVE UNION.

The second stage of co-operation which is now being developed came into existence with the advent of the South Australian Farmers' Co-operative Union, Ltd., about twenty-five years ago, when a number of the States were experiencing some of the worst and most trying times that the farmers had gone through. While money had previously been fairly plentiful, these reverses made them look for other means of trying to reduce expenditure or else to make a little more on that which they had to sell. In South Australia, the central State of Australia, a farmers' association in the chief agricultural areas had advocated some scheme of combining with the express idea of protecting the farmers. Cornsacks, which are imported into Australia from Calcutta, were the first articles on which co-operation was tried. A small company was formed; a number of orders taken for cornsacks; and the purchases made in Calcutta. The result to the farmers was most gratifying. When the cornsacks arrived in the State, the merchants were distributing them at 7s. 6d. per dozen. The co-operative society found that they could sell at 6s. 6d. per dozen, and still leave a small margin. This they did amongst their own members, but it had this effect, that as soon as these sacks were distributed the whole of the cornsacks for the State were reduced below what the co-operative society could distribute theirs for. This led the farmers to reason that if they could influence the cornsack market (an important consideration for the farmers, as all their wheat has to be bagged, there being no shipping in bulk from these States) they might, in the same way, influence the market for other products which the farmers required or produced; and so they started on the sale of wheat, which is the principal product of the farms.

Their idea was for a number of the farmers to put their wheat together and sell it in large quantities, say five or ten thousand bags at a time, the larger quantities invariably securing higher rates, and this amount could be distributed amongst the farmers thus selling. The result was most gratifying, but on every occasion they had to contend against the severest opposition from the wheat merchants.

As the various merchants are represented at each railway station and seaport throughout the State, and buy the wheat either as delivered in wagon loads by the farmers or on contract previously made, there are hundreds of these wheat agencies all over the wheat growing areas; so for

co-operation to compete successfully it must have its representative at each principal centre. But at the start of co-operation some twenty-five years ago the growth necessarily had to be slow, and while the co-operators only opened at one station, each succeeding year saw a number of additional stations opened up, and it was most gratifying to the farmers to find that invariably wherever their own co-operative company opened, the price of wheat advanced at least 2*d.* per bushel (equal to one shilling and four pence per quarter) compared with what it had previously been, taking of course the basis of the selling price at the various ports.

To explain fully this subject, we wish to deal with the growth and working of the South Australian Farmers' Co-operative Union, Ltd., which is by far the largest and most complete society not only in South Australia but in the whole of the Australian continent and can therefore be taken as the best exponent of agricultural co-operation in the Commonwealth.

The two names that stand out most prominently in this company's first stages of development are those of Mr. Thomas Mitchell of Jamestown (who for twenty years was on the Board of Directors, eighteen of which he served as chairman) and Mr. John Pearce of Caltowie, who for fourteen years was a Director, the two first years being Chairman of Directors, and as Managing Director for a number of years helped very materially in the growth of co-operation in this State.

Jamestown, the centre of a large agricultural area, about 150 miles north of Adelaide, the capital of South Australia, was the scene of the first operations 25 years ago. With 103 members the start was made, as has been explained above. The growth, naturally, for the first few years was slow. The farmers had to contend against very great odds. Every business firm was against them, and whether they bought wheat, imported cornsacks or machinery, or made a move in the direction of furnishing general farm supplies, they had to compete with each individual merchant who dealt in these lines, with the result that they were invariably undersold, and in some instances the Directors and a few of the most loyal supporters had to take over the stocks which had been purchased for sale among the farmers generally, but such treatment only stimulated those early pioneers in the movement to greater efforts, because it showed what could be done by the united action of the farmers themselves. Farmers generally are a kindhearted, hospitable class of people, but it is difficult to get them to work together even for their own benefit, and although they could in the early stages see the advantages which were to be had from co-operation, they did not seem to have the confidence either in themselves or in the pioneers to come into the business with the heartiness that one would expect them to show under the conditions. To make matters worse, the extreme opposition of the wheat merchants and the inexperience of the farmers themselves in doing their own business, led to certain losses in the early history of the company which considerably hampered its operations; and just when success appeared to be looming over the horizon, one of the agents handling a large quantity of wheat swindled the company heavily, thus losing a considerable amount of the already small

capital. Despite these facts, the grit and energy which is a dominant feature of the farmers of Australia, served its good purpose not only in holding the farmers together but in making further efforts to subscribe additional capital, and the appointment of officers who had more business training than the farmers themselves. Thus at the end of 8 years' pioneer work, the head office was removed to Adelaide, and a number of wheat agencies has been established in the chief centres of the north. Other lines of business, such as the importation of manures, the handling of the farmers' wool and skins, and the purchase of all their supplies, soon became the policy of the Union, and within a few years the general business community realised that co-operation amongst the farmers had come to stay, and instead of being an obstacle to the movement they worked as harmoniously as it was possible for business opponents to do. Four years after their arrival in the city, freehold property in a prominent position was secured; thus firmly established, co-operation has advanced ever since, and to-day the company is recognised as one of the, if not the, largest wheat selling agencies in this State, and on a number of wheat seasons it has been the largest shippers of wheat. It does not matter what a farmer produces or what he requires, it can be sold or supplied by his own company. Oats, barley, and hay, are disposed of either in the local or inter-state market. There are auction sales of wool in the season; skin and hide sales are held weekly; stock of all descriptions are sold at the local abattoirs at their various sales; auction and clearing out sales are conducted in various parts of the State, and the requirements of the farmers are catered for by the importation of cornsacks, merchandise and hardware of all descriptions, and machinery, including engines. Australia of course being a protected country, much of the machinery used amongst the farmers is manufactured locally, and although the company is not a manufacturer they represent, as agents, many of the principal manufactures in the Commonwealth.

For the purpose of carrying on the various lines of business, large freehold properties have been acquired in Adelaide. Adjoining the offices are machinery and merchandise stores, and a garage for motor cars, and in another part of the city there is a large grain and skin store. At Port Adelaide, the chief port of the State, there are large machinery stores and also leasehold properties, with some 700 ft. of wharf frontage, where wheat, machinery, and other goods, are stored, and where wool in season is displayed for sale. In quite a number of places in the country centres machinery and merchandise depots have been established. One general store exists, and a large building is now being erected in the South Eastern portion of the State to cope with the growing trade in that district. In addition to these, for the purpose of storing wheat, about forty sheds have been erected where the wheat which is stored by the farmers with the company is held during the winter months.

The management is vested in seven Directors, who are elected by the shareholders, and represent the various interests, particularly that of farming, and the general business is divided into Departments with a Manager

for each branch. A monthly paper called *The Farm* is issued to the shareholders free, containing full reports of meetings, balance sheets, and all matters of interest dealing with co-operation generally. Space is given in this to what co-operation is doing in other parts of the world, thus keeping our farmers in touch with the movement generally.

The company has a membership of about 6,000 farmers, being nearly half the farmers in this State, and although worked and registered under the Companies Act, the principle under which the company is worked is purely co-operative, in so far that no farmer is excluded from becoming a member and participating in its benefits, and the profits of the business, instead of as in the ordinary limited company going into the pockets of a few large and wealthy shareholders, are distributed amongst the men who have created the profits, in the shape of dividends and bonuses, after making provision for reserve fund. So far, however, the company has only been built up, and bonuses have not been available, although dividends are usually paid. Whilst there is no limit as to the number of shares any one farmer can hold, when it is pointed out that of the 6,000 shareholders, about 70,000 shares have been allotted, and that the minimum number one farmer can hold is ten, it will clearly show that the shares are fairly evenly distributed amongst the members. To regulate the influence, the voting power is on a sliding scale so that any two farmers holding twenty shares each could out-vote the largest shareholder in the company. As a matter of fact not more than a dozen shareholders have one hundred or more shares and the largest is about two hundred and fifty. There is provision for all farmers to become members of the company, because any can join by paying down 2s. as application and allotment fee on their ten shares, and the balance in calls extending over about five or six years. This brings it within the reach of every farmer to become a member. The shares are transferable, but great care is taken in the transfer, and proof must be given of the reason for the transfer. Shares are not acquired or bought back by the company from shareholders.

Three forms of co-operation — production, consumption and credit, — have all been combined in the operations of the company, for the farmers, not only sell through it all that they produce, but they buy from it their supplies, and at the same time it serves as a banking institution for the purpose of financing and assisting the farmers. In this branch of the business large amounts are deposited by the farmers, and this money is again returned to farmers who require it for carrying on their farming operations, and in assisting them in the purchase of their supplies. Farmers also open current accounts through this branch, deposit money, and draw on it with the ordinary bank cheque, and treat the company as their banking institution. To encourage this business, interest is paid for any money that is standing to the credit of the client.

To cope with the large business, Mr. Clement Giles, of 15 Leadenhall Street, E. C., who has had a large experience in the company, was appointed London representative some years back, and all wheat is shipped and sold through him on the London market.

The South Australian Farmers' Co-operative Union, Ltd., therefore represents in a practical form the basis of agricultural co-operation not only in South Australia, the State where co-operation first developed its activities, but it has laid a foundation upon which the co-operative societies which have recently sprung into existence in the other States are building. Its aims and objects are purely co-operative, and it has conferred innumerable benefits upon the farmers generally.

## 2. THE EUDUNDA FARMERS' CO-OPERATIVE UNION.

As might be expected, the farmers concentrating their efforts into one large and successful movement, the smaller local co-operative societies, which in the present day are continually springing into operation, have not existed in South Australia, simply because the farmers realise that in their own company they have all that they require to protect their interests, and that to form smaller and necessarily weaker societies in the co-operative movement is to hamper and hinder the cause of co-operation, as it must necessarily mean the fighting of one small society against another, instead of a combination of all the efforts in one direction.

Outside, therefore, of this large company, there is only one other society, namely, The Eudunda Farmers' Co-operative Union, which has existed amongst the producers, and this was brought into operation in one of the up-country stations from which the society takes its name, about eighteen years ago. A few farmers who had been supplying firewood from off their property to the city market were not satisfied with the result, so they decided to appoint someone to look after their joint interests, authorising him to purchase on their account their household requirements, and to take in exchange firewood, etc. This proved very satisfactory, because by combining they were able to command better prices for the commodities they had to sell, and at the same time were able to purchase their supplies at a cheaper rate, so that in the short space of four years they were able to show about £500 profit after paying all expenses. Later on they extended their operations along the railway line, and were able to dispose of more of the farmers' products at satisfactory prices. They have continued this safe line of business, selling for cash, or else taking produce from the farmers in exchange for supplies, and have opened up a number of agencies throughout the State and at each centre they have either leased or built a store which has formed the centre of operations for that district. They have fifteen of these at the present time, and also one trading steamer on the River Murray, which covers a very large district. They have over 2,500 members, and their share capital is £31,000, with a reserve fund of £3,360. They usually declare a bonus of about 5 per cent. on purchases made during the year, and 5 per cent. interest on capital. The grain trade being by far the largest

in this State, and being handled by most companies dealing with the farmers, has only been touched very lightly by this co-operative society. The trade has a speculative element in it which does not find favour with the Directors of the Eudunda Company, and they have very wisely discarded it for the future, but they are working carefully and economically, and have a decided influence for good in the localities where they exist.

### § 3. CO-OPERATIVE DAIRYING AND FRUIT-DRYING.

South Australia cannot be considered a great dairying country. There are some splendid centres well adapted for this purpose, and at these some years ago a number of small co-operative dairies existed, where the producers supplied these co-operative butter factories with milk. With few exceptions, these have not proved the success which was anticipated. First because of the large farms and the long distances which milk had to be carted, and secondly, because of the coming into use of cheaper and more economical hand separators which enabled the small dairies to separate their milk and forward their cream to the centres of population where the larger private factories were able to compete with better results against these smaller co-operative societies. So that, anywhere within the radius of 100 miles of Adelaide, the co-operative dairies, have ceased to exist.

In the South East district, about three hundred miles from Adelaide, several very profitable co-operative butter and cheese factories are in operation. The conditions are somewhat similar to England, — small fields sown with all the best English grasses, — so that a large number of cows can be kept on a fairly small area. The milk is supplied by the producer to the factory, and the price paid to the producer is worked out on the price which the cheese or the butter realises. Thus the farmers obtain the actual price of their joint product, less of course the cost of the general working of the business. If at the end of the year there is any surplus, a bonus is then paid to the producers in accordance with the amount of milk which they have delivered. A dividend is paid on the capital provided, usually at the rate of 5 per cent. Some of the companies adopt the system all shareholders must be suppliers, and should they supply to any other factory, they forfeit their shares in the company.

A very strong co-operative movement has been started among the fruit growers in the matter of establishing dried fruit factories and the grading of practically all the dried fruit produced in the State. They have several centres in which these factories exist, and the fruit is all graded to different qualities and sold accordingly. It has had the effect of raising the standard, and marketing the fruit in a much better and more even condition than was previously done, and it has brought the production before the public more prominently.

## CONCLUSION.

The question is often asked, What are the benefits of co-operation? A few of the direct advantages gained will answer that question. Besides those already mentioned, and in addition to the advantage in price of wheat, co-operation has had a regulating influence upon fixing the price of wheat on a systematic basis in accordance with the values which are received in the foreign markets, and the farmers are assured that the prices quoted for their wheat are always the legitimate market rates of the day. In machinery, through their own company importing, prices were reduced to a level leaving a legitimate margin only for profit, and in the importation of super-phosphates the Farmers' Union was the first to reduce rates and bring the price within a reasonable distance of the purchasing price of the outside market.

As previously mentioned, co-operation is only in its infancy in Australia. There are many other agricultural lines which could be extended under the principles of co-operation, and which will develop as the State becomes more thickly populated. Producers as a whole are a conservative class of people, and they would rather endure hardships than disclose their business to anyone else. Co-operation is a matter of education, and it is only by showing the producers what is done in other parts of the world and convincing them that those advantages can be extended to their own special need, that they can be induced to unite for the purpose of assisting one another. The future is before us; the possibilities of Australia are great; and it is co-operation which will aid very materially in making the best of our opportunities. As mentioned in the early part of this article, Australia does not lend itself to co-operation to the same extent as other parts of the world, but still the spirit of co-operation is growing, and the farmers are taking more interest in the movement, and, as the Societies develop, the outcome will be a national co-operative movement throughout the whole of the Commonwealth, which will bring all the producers into line; and instead of each State or Society having its own representative in England, there will be one chief Commonwealth establishment which will represent the whole of the Australian producers. This will mean cheaper handling, a more even and regular supply, and a central distributing agency where buyers can rely upon obtaining pure Australian products.



## UNITED STATES.

### MISCELLANEOUS NEWS.

I. — THE CALIFORNIA FRUIT GROWERS' EXCHANGE. — The report of the California Fruit Growers' Exchange for the year ending August 31st, 1914, shows that the total sales for the year amounted to 11,262,000 boxes of fruit, exceeding by 3.8 per cent. the sales of any previous year and representing 61 per cent. of the California crop of citrus fruit. For this fruit sold through the Exchange the growers received \$ 19,246,000, or an average return of \$ 1.71 per box.

The General Manager claims that the selling costs in the case of fruit dealt with by the Exchange are lower proportionately than in the case of any other agricultural product in any part of the world. The actual working expenses of the Exchange organisation, including office expenses, salaries, legal expenses, the cost of the daily telegraphic service and a share of the expenses of the Citrus Protective League, amounted to 4  $\frac{1}{4}$  cents per box, or 1  $\frac{3}{8}$  per cent. of the gross sales. To this must be added 1  $\frac{1}{4}$  cents per box spent by the Exchange in advertising the products which it sells, although, as is pointed out by the General Manager in his report, this expense is to a large extent an investment made to ensure the sale of future crops. But even if the whole of this amount be added to the working expenses the selling costs per box amounted only to 5  $\frac{3}{4}$  cents, and the total selling costs to 2  $\frac{1}{8}$  per cent. of the gross sales.

These figures relate to the working expenses of the Central Exchange and the seventy agencies maintained by it. They do not include the expenses of the District Exchanges, which act as intermediary organisations between the growers and the Central Exchange. The average cost of maintaining the District Exchanges amounts to less than one cent per box.

During the year 1913-14, the members of the Exchange purchased through the Fruit Growers' Supply Company — an association which, though it has a separate organisation, is in effect a branch of the Exchange — packing material, fertilisers, fungicides, heaters, oil and sundry orchard supplies to the amount of \$ 3,319,000, an amount which represents an increase of 50 per cent. upon the business done in any previous year.

The season 1912-13, owing to a severe frost, was a disastrous one for the citrus fruit industry in California, and in that season the Exchange

sold only, in round numbers, 5,000,000 boxes of fruit, after having made arrangements at the beginning of the season for the disposal of an estimated crop of 13,000,000 boxes. It is a tribute to the excellence of the Exchange methods that the industry has recovered so quickly from the misfortunes of the past year and the growers have remained faithful to the association. The Exchange may fairly claim that it has placed the growing of citrus fruits, in California at least, upon a sound paying basis. The element of speculation and uncertainty has practically been eliminated from the industry, with advantage both to the growers and to the consuming public.

The Directors of the Exchange are faced with the need of finding new markets for their fruit, or increasing the demand in existing markets. By regulating the shipments from California in such a way that each market is supplied strictly according to its needs, the Exchange ensures that consumers in every part of the country have a constant supply of fruit of good quality at reasonable prices. This alone increases the demand, and the *per capita* consumption of oranges and lemons in the United States has in fact increased enormously during the last ten years. But a still greater increase must take place if California growers are to find an outlet for their rapidly increasing production, and the California Fruit Growers' Exchange carries on an active advertising campaign with the object of popularising the consumption of oranges and lemons by making known their valuable food properties and instructing the public in the many different methods of preparing them. Unless by some such means the demand can be made to keep pace with the increased production due to the fact that young groves are now reaching the bearing stage, the stability of the whole industry will be seriously threatened by the fall in prices which must inevitably result from an overabundant supply.

The Exchange seems to have secured the support of a large number of the growers, and with its past record of success achieved under trying and difficult circumstances should be able to face the future, and the problems which the future may bring, with complete confidence.

\* \*

2. — THE CALIFORNIA ASSOCIATED RAISIN COMPANY. — Many unsuccessful, or but partially successful, attempts have been made from time to time in the past to organise the growers of muscatel raisin grapes into a co-operative selling association. The *California Raisin Growers' Association*, formed in 1898, succeeded in holding the growers together for six years, but was dissolved in 1904. Another organisation — the *California Raisin Growers' Company* — was formed in 1905 and was dissolved a year later. Finally, the present association came into existence on April 1st, 1913, as the *California Associated Raisin Company*.

The company has a paid up share capital of \$ 1,000,000 held by growers, packers, bankers and business men in the raisin-growing district of which the town of Fresno is the centre. Its principal business consists in buying raisins from the growers and selling to the packers. It began business at a moment when the market was in a most depressed state. The raisin crop of 1912 was the largest ever grown in California and when the Associated Raisin Company was formed some 30,000 tons of this crop were still in the hands of the growers, unsold. With the capital it had in hand the company bought the bulk of these raisins at a fair price and disposed of them gradually to the dealers and packers, who in a very short time acquired confidence in the power of the company to keep prices steady, and began to buy freely. The whole market was reanimated, and the company without any difficulty sold the part of the crop remaining from 1912 and the whole of the 1913 crop as well. It was certainly a fortunate circumstance that the latter crop was a short one, amounting to only 70,000 tons, or 10,000 tons less than the normal crop and 40,000 tons less than the abnormally heavy crop of the preceding year. Helped by this circumstance the prices secured by the company averaged \$ 70 a ton as against \$ 40 a ton which was the price which the growers were receiving at the beginning of 1913.

At the latter price the growers were not receiving even a living wage in return for their labour. Between four and five thousand growers consign their crop to the Associated Raisin Company, the average individual holding being rather less than 20 acres, so that the rise in prices has brought prosperity to a very large number of hard-working farmers and their families. The small size of the single holdings precludes the idea of making a large fortune out of growing muscatel grapes, but instead of losing money after a year of hard work the grower is now in a position to make a profit of from twenty to twenty-five dollars an acre.

It is worth noting that this result is due, not to any improvement in the quality of the product or to any restriction upon the supply, but solely to the fact that the company, controlling 90 per cent. of the total output, has been able to keep prices stable. The market in past years had been ruined, not by low prices or by high prices, but by fluctuating prices. With prices changing almost from day to day the wholesale dealers refused to buy on their own account, and bought only the small amounts that were ordered by the retail dealers. The retail dealers made no attempt to increase their sales, as they knew that a fall in prices in the wholesale market, after they had made their purchases, might at any moment leave them with an unsaleable stock on hand. The action of the Associated Raisin Company in keeping prices reasonably stable has made it possible for large and small dealers to keep considerable stocks on hand, with the result that they have had every inducement to promote sales and the *per capita* consumption of raisins in the United States has increased greatly in the last few years. It is still very low compared with the consumption in England, and with the object of increasing it, and thus creating a market

for the increased supply, the company is carrying on an active advertising campaign.

\* \* \*

3. — THE FORTY-EIGHTH ANNUAL SESSION OF THE NATIONAL GRANGE. — The forty-eighth annual session of the National Grange — the central directing body of the Order of Patrons of Husbandry — was held at Wilmington, Delaware, from November 11th to 20th, 1914.

The figures submitted to the delegates by the National Treasurer show that the financial position of the Order is excellent. The invested funds, together with accrued interest, amount to \$ 77,240, and the cash balance in hand at the end of the year after paying all expenses to \$ 22,750, thus bringing up the total assets to \$ 99,990. The receipts consist chiefly of the regular contributions paid to the National Grange by the State Granges in proportion to their membership, and it is interesting, as indicating the strength of the Order in the different States, to examine the amounts thus paid. The State of New York heads the list with \$ 5,434; Pennsylvania stands second with \$ 3,672; Maine third with \$ 3,495; Michigan fourth with \$ 2,448; and then follow, in order of importance, Ohio, New Hampshire, Massachusetts and Vermont, each of which paid in dues to the central treasury more than one thousand dollars; and Kansas, Washington, Connecticut, and New Jersey, each of which contributed more than five hundred dollars.

The *National Grange Monthly* — the Grange official publication — in the number for November, 1914, give a list of 32 States in which State Granges exist; but no figures are presented as to the total number of members in the Order. During the past few years the Grange has been carrying on an active extension propaganda, and during the year ending October 31st, 1914, the sum of \$ 12,000 was devoted to extension work. The financial policy for the future, as decided upon at the annual session, is to raise the permanent investment fund as quickly as possible to \$ 100,000, maintain it constantly at that level, and devote any further surplus of income over expenditure to the work of propaganda.

The reports submitted at the session by the delegates from the various States show that the Grange remains faithful to the ideals of social and educational progress which have inspired it since its foundation nearly sixty years ago, while it continues to hold a watching brief for the farmers in political discussions both in the State legislatures and in Congress. The reports show the Grange working in association with the State Agricultural Colleges, the Federal Department of Agriculture, and with other farmers' organisations, for the promotion of agricultural education, for the extension of the rural postal system, for the construction of better roads, for the conservation of the country's natural resources, and for the formation of farmer's co-operative societies.

In the matter of co-operation the Grange is proceeding with commendable caution. There are still within the Order many of the older generation of farmers who remember very clearly the disasters which overtook the co-operative enterprises launched by the Grange in the early years of its existence; and they naturally counsel prudence. In a tentative way the Grange farmers are once more combining with the object of buying and selling co-operatively, but the attempts are all upon a modest scale and nothing but the simplest and safest forms of collective purchase and sale have so far been undertaken, while some progress has been made in the formation of farmer's mutual fire insurance associations.

One recent development of the educational work of the Grange is of particular interest. This is a scheme for the provision of loans at very low rates of interest to deserving students who have not the necessary means for continuing their education in an agricultural or normal college. A certain sum of money is usually set apart out of the funds of the State Grange, and approved students may borrow up to the amount so set aside. In some cases the amount is paid over at once to the treasurer of the State Agricultural College to be administered by him at his own discretion. In some cases, again, — in Missouri, for instance — the loan fund has been raised by public subscription and is administered by the Grange. The whole movement is still on a very small scale but its usefulness is already beyond dispute. It is in keeping with the best traditions of the Grange work on behalf of progress in education, and there is every probability that it will become increasingly popular.

In every State in which it is represented the Grange lends its active support to the movement for the provision of good roads in the rural districts; but its support is qualified by its uncompromising opposition to any borrowing by the State for carrying out road construction work. It is not difficult to understand this attitude on the part of the Grangers who are consistent opponents of credit transactions of any kind, and who naturally wish to apply the same principle of prompt cash payment to public business; though it might be urged that the cost of constructing permanent roads is really an extraordinary expense which ought in fairness to be charged to capital and should not fall wholly upon income. There can be no injustice in throwing upon future generations a part of the cost of improvements of which they, as well as the present generation, will reap the benefit.

The Grange in its annual session usually discusses and votes upon current political and social questions whether directly affecting agriculture or not. Thus in the Wilmington session formal resolutions were passed in favour of woman's suffrage and of government ownership of telegraph and telephone lines, and against shipping subsidies, unrestricted immigration, and unnecessary expense in connection with the election of public officials. The Order claims with justice to be the most important farmers' organisation in the United States, and the resolutions passed in the annual session are of considerable interest as indicating the trend of opinion

among the farmers who, in spite of America's rapid industrial development, still form the most important group of workers in the community.

\*  
\* \*

4. — LOUISIANA SWINE BREEDERS' ASSOCIATION, — The Louisiana Swine Breeders' Association founded on January 8th, 1913, at the Farmers' Demonstration Conference held at Baton Rouge under the auspices of the State University, has grown into a strong organisation with more than a hundred active members and nearly twelve hundred affiliated members. The active members are breeders of pure-bred stock, or farmers who raise pigs for the market; while among the so-called affiliated members are included country bankers, teachers of agriculture, commission dealers, packers and other persons interested in increasing and improving the live stock of the State.

From the breeders' point of view the Association offers the best means of getting into touch with farmers who wish to buy pure-bred pigs for the purpose of improving the quality of the stock they are breeding for the central markets. The farmers look to the Association to assist them in obtaining better marketing facilities and better protection for their stock from contagious diseases and animal pests. The bankers lend their support because they are convinced that the future prosperity of Louisiana, and of the whole of the South, depends very largely upon the introduction of diversified farming, which implies, necessarily, a very great increase in the number of head of live stock of all kinds on Southern farms.

According to an article in the *Rice Journal and Southern Farmer* the Association needs in the first place to devote its energies to stamping out hog cholera in Louisiana. The measures already undertaken by the State Live Stock Sanitary Board have yielded excellent results but have been quite inadequate in view of the vast extent of territory affected and the rapid increase in the number of pigs in the State. The Association insists that the annual appropriation for the work of the Sanitary Board shall be increased to an amount commensurate with the task upon which the Board is engaged.

The work of providing transport and selling facilities is undertaken by a special committee — the Shipping and Marketing Committee — of the Association, assisted or at least advised by members of the staff of the State University. The Committee has begun its work by organising regular shipments of pigs in carload lots, combining the small consignments of individual farmers in one locality into a single consignment of about a hundred head, and despatching such a consignment to the central markets at regular intervals. The method is one which has already yielded excellent results in the North Central States where live stock shippers' associations are numerous. By adopting it the farmers effect a very consider-

able saving in freight and the numerous incidental charges (for loading, weighing, feeding and watering stock on long journeys, etc.) which make up the total cost of transport, while at the same time they receive more consideration from the commission dealers to whom they consign their stock, who are apt to pay but little attention to the small consignments of the individual farmer, but who are usually anxious to secure the business of an association in a position to send large consignments to market regularly.

A gratifying feature of the work of the Association is its close connection with the agricultural extension work of the Louisiana State University. Southern farmers upon the whole understand but little of the art of breeding and caring for live stock, yet if farming in the South is to be raised from the level of a speculative occupation to that of a sound, remunerative industry, it is essential that they should turn their attention to this branch of agriculture. In spreading throughout the State the necessary knowledge of scientific breeding and feeding, the Association and the University can be mutually most helpful.

## NOTICES OF SOME RECENT PUBLICATIONS RELATING TO CO-OPERATION AND ASSOCIATION.

### AUSTRIA.

MANUALE DEL COOPERATORE. Raccolta di istruzioni per consorzi cooperativi (*Co-operator's Manual. Instructions for Co-operative Consortiums*). Published by direction of the Federazione dei Consorzi cooperativi per la parte italiana della provincia di Trento. Trent, 1914. Press of the Trent Diocesan Committee. 486 pages.

The Federal Council of the Rural Banks and Co-operative Associations of Trent decided, at its meeting of February 23rd, 1912, to publish a series of practical manuals for the assistance of co-operators in the administration and management of the numerous credit, distributive and production co-operative societies that have arisen in the district of Trent. The compilation of these manuals has been entrusted to Signor G. Margoni, who has now published the first, which contains a collection of general instructions necessary for those engaged in co-operative work. The volume consists of 56 chapters, to which is added an Appendix.

It is arranged on a very useful practical system and supplies a great need; in fact the lack of a book of this character, a safe guide in all branches of the administration and book keeping of the economic consortiums had been felt in the district of Trent, where co-operation has become firmly rooted. After giving a clear definition of the co-operative idea and the classes into which co-operation may be divided, the volume goes on to treat of the constitution of the co-operative consortiums, the registration of these consortiums in the proper books, the submission of the Rules to the *Capitanato*, the registration of any alterations in the rules and new members of the boards of management, collective registration in the registers of consortiums, inspection of the co-operative consortiums, the registers, the members, withdrawals from co-operative consortiums, transfers of shares, remuneration of officers, internal regulations, industrial taxation of co-operative consortiums, direct taxes, the whole body of the members of the co-operative societies, sale on credit to third parties, articles offered for sale and taxes and customs dues to which they are subject, insurance against fire, sickness and accidents for the staff in the service of the co-operative associations, rural loan and savings banks, income tax, the facil-



ities accorded by law to the rural loan and savings banks and many other subjects connected with the administration and book keeping of these consortiums; organization of co-operation in the Trent district, insurance of pensions for private employees, dairy societies, wine societies, bills of exchange, cheques, money, weights and measures; the last chapter, finally, gives model rules for co-operative consortiums.

The book concludes with an appendix containing twelve laws relating to or directly affecting co-operation in Austria.

We may say that nothing is lacking in this volume that could be of practical use to the managers and staff of co-operative societies; it is therefore certain that it will be read widely in Austrian co-operative circles generally and especially in those of Trent, for which it is intended.

JAHRESBERICHT ÜBER DEN STAND DER MILCHWIRTSCHAFT IN DEN IM REICHSRATE VERTRE-  
TENEN KÖNIGREICHEN UND LÄNDERN ZU ENDE 1912. Nach amtlichen Quellen zusammen-  
gestellt im K. K. Ackerbauministerium. (*Report on the Dairy Industry in the Kingdoms  
and Countries represented in the Imperial Parliament. Compiled from Official Information  
in the Department of Agriculture*). Vienna, 1914. K. K. Hof- und Staatsdruckerei, 8vo,  
232 pages.

The above report consists of two parts: the first contains a summary of the situation of the dairy industry in the various provinces, except Carniola, Salzburg and Vorarlberg, for the Year 1912; the second gives statistics of the dairies working in 1912, those only being considered that treat 50,000 kilogrammes of milk a year, or, in the case of the accounts being made out for periods of less than a year, an average of 150 kg. per day.

This second part which is concerned with the statistics is in its turn subdivided into three large parts: the first giving statistics of the schools and institutes interested in the industry, and the figures showing their respective dairy production; the second containing statistics of the co-operative societies, both registered and independent, that is to say dairy societies (*Molkereigenossenschaften*) and Alpine Dairies (*Alpensennereien*): The principal figures given relate to the number of dairies, the mode of working (whether by means of hydraulic power, electricity, steam, gas, benzine, by hand etc.), the number of members, the number of shares, the length of the working period, the quantity of milk received, sold or treated, the production etc.

The third subdivision contains statistics of private dairies giving the same particulars as in the case of the dairy societies, except, of course, those concerning the constitution of dairy societies on a co-operative basis.

The work is of great importance for an appreciation of the great progress made in Austria by the dairy industry and above all as showing the progress made by the co-operative idea in this branch of the national economy; in spite of the fact that much of the information given in the Report is not the very latest.

We shall return to the subject hereafter.

## BRITISH INDIA.

ANNUAL REPORT (FOR THE YEAR 1913-14) ON THE WORKING OF CO-OPERATIVE SOCIETIES IN:  
(1) BOMBAY PRESIDENCY INCLUDING SIND; (2) COORG; (3) ASSAM. Government Publications. 1914.

In these three provinces of British India the co-operative movement has continued to make very satisfactory progress during the year 1913-14. The increase in the number of societies, the number of members and the amount of working capital may be shown in tabular form, thus :

	Bombay Presidency.	Coorg.	Assam.
<i>Societies.</i>			
1912-14 . . . . .	515	22	188
1913-14 . . . . .	698	22	249
<i>Members.</i>			
1912-13 . . . . .	46,221	2,320	10,945
1913-14 . . . . .	66,704	2,440	13,629
<i>Working Capital.</i>			
	Rs.	Rs.	Rs.
1912-13 . . . . .	48,47,763	91,434	5,56,098
1913-14 . . . . .	66,13,135	1,06,920	6,81,805

In the report on the working of societies in the Bombay Presidency the references to the Central Co-operative Bank are of particular interest. The Bank was founded in 1911 to provide a strong central credit institute for co-operative societies throughout the Presidency. That it has fulfilled this function well may be concluded from the fact that during the year under review, in spite of a grave financial crisis which drove many joint-stock banks into bankruptcy, the Central Co-operative Bank was never forced to stop or curtail its lending business or raise its rates. At no time was it in the slightest danger and its position seems now as strong as ever. It is worth noting that the number of shareholders has slightly declined during the year, and that for the first time a number of registered societies have become shareholders.

The majority of the co-operative societies in British India are agricultural credit societies each comprising about 40 members and doing business on a very modest scale. The opinion of the Registrar in Bombay upon the working of the agricultural credit societies in the Presidency is somewhat

significant. He says: "Of the 568 agricultural societies now existing I estimate that about 150 are excellently managed and about 250 more are in a sound and satisfactory condition. The remainder are crippled by defects which may be ascribed, not to the system upon which they work, but to their failure to adhere to that system faithfully".

The most interesting part of the co-operative movement in the small province of Coorg is the formation of mutual cattle insurance societies. There are now 9 of these societies insuring 558 head of cattle for a total value of Rs. 6,212.

In Assam, in addition to credit societies, there are several weavers' societies, one co-operative distributive store — the management of which is, in the opinion of the Registrar, not yet satisfactory — and one co-operative dairy which was not registered until March, 1914, and about which, therefore, it is too early yet to speak.

The reports contain tabular statements in detail of the progress and financial position of the societies of each type (Central, Agricultural and Non-agricultural), including statements relating to Central Societies and Agricultural Societies which are specially prepared each year for the use of the International Institute of Agriculture.

#### SWITZERLAND.

XI. JAHRESBERICHT DES SCHWEIZERISCHEN RAIFFEISENVERRANDES (Eingetr. Genossenschaft mit beschränkter Haftpflicht) über das Jahr 1913. (*Eleventh Report of the Federation of Swiss Raiffeisen Banks (Registered Consortium, Limited) for the Year 1913*) Frauenfeld, 1914. Buchdruckerei F. Müller, 8vo.

The annual report of the Federation of Swiss Raiffeisen Banks at once in its preface reveals the insufficient organization of co-operative credit, in Switzerland. And, indeed, in spite of the progress made by the Swiss rural banks in recent years, they are not yet firmly enough established to succeed in satisfying the requirements of Swiss agriculture. There are in Switzerland, as the report we are summarising shows, whole regions where there are no institutes of the kind; elsewhere again they are insufficient in number and lack vitality.

The statistics for 1913 were as follows:

Number of Banks . . . . .	165
Number of Members . . . . .	11,507
Total Business Done . . . . .	Fr. 50,220,170.25
Total Debits and Credits . . . . .	» 27,444,310.81
Number of Depositors . . . . .	29,549
Savings Deposits . . . . .	Fr. 12,832,339.90
Reserve Fund . . . . .	» 474,880.74

A glance at the statistics of the Raiffeisen Banks for the period 1903-1913, however, at once shows the progress made by the co-operative idea as applied to agricultural credit; we may indeed say that in 1903 agricultural co-operative credit was only at its commencement in Switzerland, where there were only 25 banks with 1,740 members, a total business of 6,000,000, francs, debits and credits amounting altogether to 1,765,000 frs., 2,323 depositors, about 500,000 frs. deposited and not more than 10,500 frs. in the reserve funds. The progress, therefore, since 1903 has been very great, in spite of bad seasons, financial disasters, a scarcity of money and a fall in price of certain agricultural products (the price of milk, for example, fell between three and five centimes the litre), preventing an even more considerable development of this class of credit institutes. The Raiffeisen banks, however, had not to suffer to the same extent as the other credit institutes from this state of things; it must also be noted that their financial situation went on improving even during 1913, so that it may be expected that they will make even greater progress and attain an even greater independence of the other credit institutes. When they have become quite independent of other banks they may be made entirely dependent on the Federation even in financial matters, which is one of the surest conditions for the solidity of co-operative credit institutes.



## Part II: Insurance and Thrift

### BELGIUM.

#### BELGIAN UNEMPLOYMENT BENEFIT SOCIETIES.

##### OFFICIAL SOURCES :

LES BOURSES DU TRAVAIL EN 1913 (*Labour Exchanges in 1913*). *Revue du Travail*, published by the Belgian Labour Office, No. 11, Brussels, June 15th., 1914.

RAPPORT RELATIF A' L'EXÉCUTION DE LA LOI DU 31 MARS 1898 SUR LES UNIONS PROFESSIONNELLES PENDANT LES ANNÉES 1908-1910 (*Report on the Application of the Law of March 31st., 1898 on Professional Unions in the Years 1908-10*), presented to the Legislative Chambers by the Minister of Industry and Labour. Social Insurance and Thrift Office. Brussels, Dewit, 1914.

DIE ARBEITSLOSENVERSICHERUNG IM IN- UND AUSLAND. (*Insurance against Unemployment in Germany and Abroad*). Publications of the Imperial Statistical Office. Labour Statistics Division. Supplement to the Reichs-Arbeitsblatt. Berlin, no. 12. December, 1913.

ASSOCIATION INTERNATIONALE POUR LA LUTTE CONTRE LE CHÔMAGE. Rapport relatif à l'activité de l'Association pendant les années 1910-1913 (*International Association on Unemployment. Report on its Work in the Years 1910-1913*). In : *Bollettino dell'Ufficio Italiano del Lavoro*. Rome, no. 16. August 16th., 1914.

##### OTHER SOURCES :

VERMEERSCH (A.) and MÜLLER (A.) : La législation et les œuvres en Belgique (*Legislation and Social Institutions in Belgium*). Paris. Alcan, 1909.

Among the social economic institutions of Belgium, those making provision against unemployment are among the most interesting and characteristic. In this field, indeed, Belgium has served as an example to many other countries, that have imitated its institutions, adapting them to meet their own requirements. It is well therefore to examine the manner in which the relief of the unemployed is organized.

## § 1. UNEMPLOYMENT BENEFIT SOCIETIES OF THE LABOURERS' ORGANIZATIONS.

In a former number of this Bulletin (1), we dealt with the professional Unions of Belgium and saw that those formed of workmen occupy themselves principally with the study of the means for relieving the unemployed. Some of them have founded for the purpose *unemployment benefit societies* among their own members, for the purpose of granting subsidies to members unemployed owing to circumstances independent of their own will.

Although the lack of statistics that might render it possible to calculate the average unemployment in the various provinces, together with certain economic facts that complicate the problem, make it difficult to estimate the risk, still some results have been attained.

As in fact appears from a report presented in 1914 in the Belgian Parliament by the Minister of Industry and Labour (2), out of 512 workmen's unions legally existing at the end of 1910, 190 had unemployment funds and 84 of these had collected during the year from their own members (7,106), 25,279.70 frs. in special contributions for the unemployed, an average of 300.94 frs. per union and 3.55 frs. per member.

From the above report we see besides that last year the unions giving compensation for compulsory unemployment were 275, and the amount given was altogether 76,210.65 frs. (or an average 277.12 frs. per union). It is evident from the above that the unions do not collect from their members the whole amount of these special contributions towards the subsidies they give, and they have instead to utilise for the purpose the ordinary funds of the syndicate bank.

The number of days of unemployment for which compensation was given amounted altogether in 1910 to 55,517 and the number of workmen assisted to 5,446. Every workman was on an average assisted for 10 days with an amount of 13.88 francs.

The organization of these banks varies greatly and the same may be said of the principles on which they work. Owing to want of sufficient experience, the relation between the contributions and the compensations given has up to the present been settled in a rather empirical fashion. And provision is only made for a small portion of the working class, the members being recruited solely from among workmen affiliated to professional unions.

Let us now see how the public institutions intervene to encourage and promote thrift on the part of workmen in view of possible unemployment.

(1) See *Monthly Bulletin of Economic and Social Intelligence*, August, 1914, pp. 1 et seqq.

(2) See the sources indicated at the head of this article.

§ 2. SUBVENTIONS FROM THE COMMUNAL AUTHORITIES:  
UNEMPLOYMENT FUNDS.

The authorities began to make systematic provision against unemployment in 1897, when the Liège Provincial Council voted a subvention of 1,500 francs to the mutual unemployment benefit societies.

This form of intervention was soon largely extended, the communes forming special "unemployment funds". The first was instituted in Ghent in 1899.

Starting from the principle that every effort made by the workmen (on salary or on wages) to defend themselves against compulsory unemployment must be encouraged, the Ghent communal administration decided to grant certain credits to increase the amount of the compensations paid by the above unemployment societies to their members and entrusted a special committee with the distribution of these subventions.

The associations that desire that their members may benefit by these subventions must submit to the conditions with regard to organization and inspection laid down in the regulations. The committee administering the Fund arranges for an inspector to inspect the work of the unemployment society in accordance with which the communal subvention is calculated. Reduced to its simplest expression: *the Ghent System* (1) means a subvention to the individual unemployed workmen, granted through the medium of the syndicate, which advances the money and is repaid at the end of the month. The subvention is substantially an addition made, at a definite rate, to the compensation granted by the syndicate to the unemployed members in accordance with the rules, for a period of no more than 60 days a year per workman, and may amount to a maximum of 100 per cent per franc of the original compensation per day.

Similar subventions are granted on the basis of the savings of the unemployed who save individually or collectively in view of possible compulsory unemployment.

Recently, the president, M. L. Varlez, in the name of the Committee administering the Fund, proposed certain reforms to be made in the above system. These proposals related to the following matters (2):

(a) At first the Fund was to have been a purely local institution, dependent only on the commune of Ghent, but gradually also the suburban

(1) This system has been applied in Italy with success in the "Cassa di sussidio alla disoccupazione" (*Fund for the Benefit of the Unemployed*), instituted in 1905 by the *Società Umanitaria* of Milan. See the number of this Bulletin for July, 1914, pp. 51 et seqq.

(2) See the *Bollettino di Notizie sul Credito e sulla Previdenza*, published by the Department of Agriculture, Industry and Commerce of the Kingdom of Italy (General Management of Credit and Thrift), No. 5, September-October, 1912.



communes began affiliating themselves to it, and it was necessary to allow their claim to share in the administration of the Fund, and to send representatives to the Committee with right to vote. The Committee of the Fund, with the object of reconciling this right of the suburban communes with the claim of the delegates of the commune of Ghent to have the chief share in the administration of the Fund, proposes that every Commune should have a number of votes corresponding with the amount of the subventions it pays.

(b) It is proposed further to give a place among the rules of the society to the byelaw that makes the entry of the name of the unemployed workman on the register of the Labour Exchange a necessary condition of his receiving the communal subvention.

(c) In virtue of its early rules, the Fund could and did effectually continue the grant of compensation from the commune to the unemployed who had drawn the full amount to which they were entitled from the syndicate. For this purpose, a credit was opened to the account of every unemployed workman for the amount that would have been due to him as subvention from the commune if this were calculated at the maximum rate of 100 % of the compensation granted by the syndicate instead of at a lower rate. The unemployed workman, after the lapse of the period for which the syndicate gave him a subvention, received from the Fund an additional subsidy of three francs a week, until the credit was exhausted. The Committee now proposed to make this a Rule.

(d) The fund now benefits the members of the syndicate unemployment insurance societies, syndicate savings banks, insurance societies and the savings banks not belonging to syndicates and those workmen who save independently. Thus there are five classes benefited by it. Its eclecticism is an argument the advocates of the Ghent system bring forward, when the system is accused of being too favourable to the syndicate movement. On the other hand, the system is accused of excessive encouragement of those saving individually, to whom the commune grants subventions to the amount of 60 % of their deposits. In reality, however, almost all those who benefit by the communal subventions are members of syndicates. The Committee of the Fund proposes to change this condition of fact to one of right and refuse the claim to communal subventions on the part of those who save independently and of the members of savings banks not belonging to syndicates.

The system of Ghent, above mentioned, is in high favour: on the one hand, by effect of it, unemployment insurance has become general in the workmen's syndicates; on the other, many communes will soon follow the example of Ghent, in 1904 in fact there were already 12 communal unemployment funds; three others were organized in 1905, four in 1906, five in 1908, etc. And now there is not a city of more than forty thousand inhabitants but has its unemployment fund.

Generally, they are all founded on the model of that of Ghent. The Liège Fund differs somewhat, as it gives collective quarterly subventions to the affiliated unemployment societies.

There is a constantly increasing tendency in favour of intercommunal Funds and already some have been formed.

Each Fund, whether communal or intercommunal, works independently within the limits of its own district.

In 1910 there were 22 Funds working, to which 50 Communes and 362 syndicates adhered. During that year the subventions granted by the Funds amounted to 88,781.14 fr. against 199,798.16 fr. paid by the affiliated syndicates.

Besides granting subsidies to the communes the provincial administrations also grant them to the professional unions that have instituted societies to give assistance in case of compulsory unemployment; the amount of the subventions and the rules in accordance with which they are granted vary from province to province.

The State also grants subventions for the same purpose. Since 1907, indeed, the Department of Industry and Commerce has had at its disposal an annual credit for the purpose of the encouragement of the free labour bureaux and the unemployment benefit societies.

Up to the present, three kinds of institutions have received State subventions: the Communal Funds, the Unemployment Societies affiliated to them and the recognized professional unions not affiliated. In the case of the latter and of the affiliated societies, the subventions supplement the compensations granted to the unemployed members of the associations.

In 1910, subventions were granted to the amount of 18,124 frs., 2,760 frs. being granted to the Communal Funds, 13,809 frs. to their affiliated societies, and 1,555 frs. to recognized professional unions.

To-day about 400 syndicates are receiving public subventions: in 1912, they received altogether 222,126 fr. in subventions, 147,385 fr. from the Communes, 49,830 fr. from the Provinces and 24,911 fr. from the State.

### § 3. THE LABOUR EXCHANGES.

Both on private initiative and on that of the communal and provincial administrations, free public labour bureaux have been founded in Belgium, under the name of Labour Exchanges, in the various parts of the country, for all workmen.

The Labour Exchanges centralise the supply and demand for labour and help workmen to find employment.

They make provision for this purpose: (a) in the first place by opening establishments in which the employers and employees may meet and make arrangements; (b) by publishing the applications they receive; (c) by informing those concerned of the corresponding supply and demand.

There are four kinds of Labour Exchanges: 1. The Communal Exchanges; 2. Semi-Official Exchanges, placed, that is to say, under the supervision of the Commune and under the Management of a Mixed Com-

mittee with representatives of the Commune; 3. Exchanges formed by Associations, amongst which we may note those founded by professional Unions of Workmen and Clerks; 4. Purely Private Exchanges.

Like those previously mentioned, these institutions receive subventions from the Communes, the Provinces and the State. The latter has in fact since 1904 granted subsidies to the Exchanges that observe certain rules.

At the end of 1913 there were 49 Exchanges recognized by the State. To 43 of those that were working in 1912 the State granted subsidies in 1913 to an amount of 29,370 frs. Seven Exchanges, founded in the course of 1913, received each a subsidy of 200 francs as contribution towards their first instalment. The two Exchanges of Louvain and Namur, which had founded special departments for the employment of women, each received a subsidy of 150 francs.

The provinces and communes have also given their support to the free labour bureaux. The subventions granted by the former amounted to 11,227 frs.; those granted by the communes to 33,101 frs.

A certain number of communes also assist the Exchanges by furnishing them with rooms, providing clerks, etc.

With regard to the work of the Exchanges, let us observe that in the course of the year 1913, they received altogether 88,188 applications for employment (67,489 or 76  $\frac{1}{2}$  % from men, and 20,699 or 23  $\frac{1}{2}$  % from women).

The number of the applications and that of the Exchanges in each of the years from 1904 to 1913 is seen in the following table:

TABLE I. *Number of Applications for Employment in each Year from 1904 to 1913.*

Years	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Applications	20,461	17,156	19,258	23,808	39,852	51,576	60,066	69,694	71,204	88,188
Number of Exchanges	10	10	10	12	14	17	29	37	43	49

On the other hand, the offers of employment increased in 1913 to 74,700 (55,083 or 74 % for men and 19,617 or 26 % for women).

We give below the number of offers of employment made to the Exchanges for each year between 1904 and 1913:

TABLE II. *Number of Offers of Employment for the Years from 1904 to 1913.*

Years	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Offers . . .	13,303	14,436	16,312	18,520	21,592	27,970	40,752	55,975	64,801	74,700
Number of Exchanges	10	10	10	12	14	17	29	37	43	49

Finally, the number of individuals for whom employment was found in 1913 was altogether 43,739; 33,010 (75 %) men and 10,729 (25 %) women.

Comparing the supply and demand and the employments found, we see in 1913 that there were 123 applications for work per 100 offers of employment (113 in 1912, 125 in 1911, 152 in 1910); and 49.5 % of those applying found employment (50.6 in 1912, 45 in 1911, and 41 in 1910), and 58.5 % of the situations offered were filled (56 in 1912, 57 in 1911, 61 in 1910).

But for the more effectual success of the efforts of the Exchanges, the exchange of communications between them must be arranged and perfected. In this consists the advantage of Federations, which also for this class of institutes are an element of strength. Let us mention the Federation of the Limbourg Labour Bureaux, the object of which is precisely the interchange of applications for and offers of employment, and the National Federation of Labour Exchanges, founded at Liège in 1902.

#### § 4. "MAISONS DU TRAVAIL" AND OTHER REMEDIES FOR UNEMPLOYMENT.

In times of considerable unemployment many Communes have decided to construct roads, clear land, remove rubbish, etc. In order to prevent a crisis in the hardware industry, the State gave a contract for the supply of the railways.

Further defence against unemployment is afforded to the workman by auxiliary industries carried on at home; thus, in the country, he may occupy himself in many domestic industries.

Benevolent institutes have been founded on private initiative to obtain needlework and embroidery for the women to do, and woodcarving work etc. for unemployed men. There is a form of benevolence in use in the *Maisons de Travail*, which cannot be too much admired from the point of view of utility and thrift. Charitable persons, instead of giving alms to those in need, give them tickets for work to be done in the establishment, at the rate of 20 centimes the hour.

But the best labour establishments seem to be those in connection with the professional unions. Here the dignity of the workmen is fully

respected ; for work perfectly corresponding with his capacity he receives, in fact, the usual rate of pay and so cannot find it humiliating.

Finally, those unemployed through idleness or of necessity find a last refuge in prisons, in which they are confined by judicial sentence, in mendicants' homes or in benevolent agricultural colonies.

#### § 5. INTERNATIONAL ASSOCIATION ON UNEMPLOYMENT.

On September 21st., 1910, the members of the International Unemployment Conference held at Paris decided, as we know, to form an " Association internationale pour la lutte contre le chômage " (*International Association on Unemployment*), divided into various national sections, but with the general office at Ghent. The Belgian section is one of the most important and includes more than a hundred organizations and individual associates. The object is to establish a permanent bond between the various institutions that, under various forms, have engaged in the struggle for the reduction of the unemployment of workmen, so as to harmonise their various efforts and encourage the necessary studies for an efficacious action.

We think it well to give some information on the subject.

In the first place, the Association has two classes of members: those immediately of the international central society and those belonging to the national sections of it.

The first are rather few and tend to diminish with the successive foundation of national sections: there are now 35, 15 of them in Europe and 20 outside of Europe; although few in number, they have weight for the future of the Association, since they belong to fourteen different countries and on the activity of their propaganda depends the constitution of new sections.

By far the most of the members, however, belong to the national sections and they again are divided into two classes: those called regular members to whom the Bulletin of the Association is sent and who pay 5 francs a month and the members depending on the national body who do not receive the Bulletin and whose numbers it is difficult to calculate.

Many of the adherents are collective bodies, amongst which there are 169 public social institutions and 80 public offices of various kinds (Government offices, official insurance organizations, Chambers of Labour, etc.).

The large cities of Europe have adhered to the organization and even many associations have become members. Amongst the latter there are 57 associations of workmen and clerks, 42 employers' associations, 51 different scientific associations and institutions.

Altogether there are 1,046 members, of whom 647 were individual members, 9 Governments, 30 provinces, 130 cities, 17 Government offices, 12 national or provincial insurance societies, 21 Labour Exchanges, 17 Unemployment Funds, 13 Municipal offices, 57 workmen's syndicates, 41 masters' associations, and 51 miscellaneous associations or institutions.

The national sections the rules of which are already or will be shortly approved are represented by the following countries: Holland, Spain, Germany, Austria, Belgium, France, Great Britain, Hungary, Italy, Luxembourg, Sweden, Switzerland, Denmark, United States, Finland and Norway.

During the short period of its existence the association has already carried out a large part of its extensive programme, which in fact included:

(a) The organization of a permanent international secretariat to centralise and keep at the disposal of those concerned the documents and information relating to the various aspects of the relief of unemployment in the various countries;

(b) the organization of periodical, public and private international meetings;

(c) the organization of special research into the more important aspects of the unemployment problem;

(d) the publication of essays on unemployment and of a bulletin;

(e) the exercise, in connection with the private institutes and governments of every country, of action for the promotion of legislation, for the collection of comparative statistics, and for the conclusion of agreements and treaties in relation to unemployment.

Now, with regard to each of these items, the road has been prepared and, in the case of some, great progress has been made.

In fact a general office has been established at Ghent; a publishing office has been founded in Paris and a complete bibliography on the subject is in course of publication.

Besides, since the first year of its existence, the Association has published a Bulletin, containing, in addition to the chronicle of the most notable events and the proceedings of the society, the text of the principal laws on unemployment. Every three months it intends to publish a complete study of the most important aspects of unemployment.

Interesting monographs have also been published, especially on the following subjects. 1st. Insurance against Unemployment; 2nd. Recruiting of Workmen; 3rd. Emigration and Recruiting of Farm Labourers; 4th. Assistance to the Unemployed; 5th. Statistics of Unemployment.

Important work has also been done by the various national sections, which have taken different measures in regard to insurance against unemployment, the recruiting of labour, professional assistance and education, and have published bulletins, books and pamphlets for purposes of propaganda.

In order to enlarge its own field of action, the Association has recently entered into an agreement with the International Committee of Social Insurance and the International Association for the Legal Protection of Labourers, on the basis of a collective propaganda in the countries outside Europe and the institution there of mixed associations, depending on the three organizations, for the purpose.

## SWEDEN.

### THE CO-OPERATIVE INSURANCE OF PIGS IN SWEDEN.

By H. JUHLIN DANNFELT,

*Secretary of the Royal Academy of Agriculture.*

The insurance of live-stock in Sweden commenced with the horses, of which at present more than 350,000, or 60 per cent. of the whole Swedish stock, are insured. Cattle insurance, though of more recent date, has progressed rapidly so that at the end of 1911 it embraced nearly 400,000 head or about 14 per cent. of the total number in the country. The pigs are on the contrary comparatively seldom insured. The principal live stock insurance company (*skandinaviska kreatursförsäkringsaktiebolaget*), one of the largest of its kind in the world, has not taken up this branch at all and in another, newly started and less important company for general live stock insurance, embracing the whole country, it is still rather insignificant.

As a rule the insurance of pigs is limited to small farmers, crofters and labourers, owning only one or some few animals, and has been undertaken by local societies generally embracing a single parish or even smaller districts and always based on mutual principles.

There are no reliable statistical returns as to the number of pigs insured, nor of their insurance value, but the small extent of this branch of insurance business is shown by the fact that of the whole number of over 700 institutions for the insurance of live-stock entered in the registers of the Board of Insurance Inspection there are only 30 which insure pigs, and of these 29 are small local mutual societies. There may, however, exist in some rural industrial or other densely populated centres a number of pig insurance societies formed by labourers which have not been notified to the said Board.

These societies have mostly been formed during the last 10 years. The largest number (9) of them are found in the densely populated and intensely cultivated districts south of Malmö in the south-west corner of Sweden; the rest are scattered over most of the southern and central provinces, but there are hardly any in the northern section of the country, "Norrland," where pig-keeping is less common. The majority of the societies

only insure pigs; 9 insure also cows and 3 horses, cows and pigs, but always with special sections for each kind of animal.

The object of the insurance is always to meet the losses caused by disease or accident; for 11 societies it is expressly stated that compensation is paid only when the disease or accident has caused the death or killing of the animal, but the same rule is probably generally practiced, there being only one society in whose rules compensation for diminution of value is mentioned. One society also pays compensation for animals stolen.

All the mutual societies work under the simplest forms and with the least expensive administration. The rules are often very incomplete, lacking essential provisions which in such cases must be compensated by practice. The committee of management generally gets no remuneration for its work, or a very trifling one, such as the free insurance of one pig; where there is a special treasurer or appraiser he gets a small commission, as for instance, 10 öre for each insured pig or 5 per cent. of the aggregate contributions.

At the general meeting every member present generally has one vote; in 6 societies there is one vote for every 100 crowns (1) of insurance value and in 2 of these societies no members may dispose of more than  $\frac{1}{20}$ th or  $\frac{1}{10}$ th of all the votes of the members present.

Societies embracing a larger district are generally divided into sub-districts or circles, each represented in the committee by one member.

A great part of the societies have in their rules provisions limiting the membership to small agriculturists, generally by allowing only small holders or labourers or owners of not more than 2, 3 or 4 pigs to become members. Thus the farmers, properly so called, are excluded, and sometimes also, by special provisions, dairymen and butchers. In order to prevent too great risk 10 societies have fixed a certain minimum insurable age (2, 6 or 8 weeks) and all of them insist that the animals to be eligible for insurance shall be in good health and free from disease, this being generally ascertained by inspection. In 6 societies the members are bound to present all their pigs for insurance; in one society all the animals collectively. In other societies, where this provision does not exist, it is stipulated that it shall be stated exactly which of the animals are insured. Some societies insure only store pigs or charge a higher rate for breeding animals. In 4 societies it is expressly forbidden to grant any application for insurance, when an epidemic has occurred in the neighbourhood, and 10 societies have in such event reserved the right to decide whether any compensation shall be paid.

In some societies the pigs are insured at cost price and are then to be insured directly after the purchase. Otherwise the animals are generally valued by an officer or member of the committee, the appraiser, on application for insurance; at this valuation different rates are applied such as: the cost price with the addition of 10 crowns a month until 1 year; or 7.50 crowns a month up to 100 crowns.

(1) 1 crown = 100 öre = 1.1 shillings.



Owing to the small number of members and their modest resources, the necessary means for the administration and the payment of compensation are generally procured only in part by premiums or other regular fees but partly or chiefly by special levies calculated according to the compensation that is to be paid. Almost all the societies charge a small *entrance fee* either personal (half a crown to one crown) or for every insured pig (a quarter of a crown to 1 ½ crowns) or in proportion to the insurance value (½ to 1 ½ per cent.) In 5 societies the entering member has also to pay 25 öre for his membership-book or for a copy of the rules. In 10 societies each member has besides to pay a small *regular fee* either personal, of 1 crown, or for each pig, from a quarter of a crown a year up to the same sum monthly, or yearly 1 ½ to 2 per cent. of the insurance value. The deficient sum must be made up by *levies*, raised either on every occasion when it is necessary to pay compensation, or, in most societies, once a year. This contribution is calculated in proportion to the number of insured animals or to the insurance value. Only one society has a fixed premium (half a crown a year for every animal).

Another consequence of the modest resources of the societies and their members is the absence or insignificance of accumulated funds. Several of the societies transfer the yearly surplus to an insurance or reserve-fund and two of them add the entrance fees to this fund. But it never does grow to any considerable amount, the compensation being partly paid out of the sum as soon as it has reached 100 to 200 crowns (in one society 1,000 crowns) or 10 per cent. of the amount of the insurance in force.

When an insured pig falls ill or meets with an accident, the owner (according to the rules of 19 societies) must at once inform a member or officer of the committee, who will inspect the animal without delay and decide whether a veterinary surgeon shall be called or the animal be immediately slaughtered. In 3 societies the owner himself must call the veterinary surgeon and inform the committee when the animal is dead or has been killed. In any case the instructions of the veterinary surgeon must be scrupulously carried out, else the society will not be liable to pay any insurance indemnity. Five societies pay the fee of the surgeon and three societies also the medicine prescribed by him.

When an insured animal dies or must be slaughtered in consequence of an accident or disease, the owner must immediately inform the representative of the committee, so that the carcass may be inspected and, if there seems to be any reason for it, dissected.

The compensation for an insured animal is generally paid immediately after its death at its full value, with deduction of the estimated value of those parts deemed proper for human food. Generally the owner is bound to take such parts at their estimated value. One society pays the whole value and disposes of the carcass.

As to the amount of the compensation to be paid, the rules of the societies are very varied. There are only 8 societies which pay compensation equal to the insured value. Nineteen societies base the payment upon an estimate made at the time of the loss, but in many cases do not pay the

actual estimated value. Thus 6 societies have fixed a maximum amount for the indemnity (75-150 crowns). Six societies reduce the estimated value in the same proportion as the total estimated value of all the insured animals of the same owner exceeds their insured value. Two societies do not pay more than half the value of animals affected with trichinosis, and two have the same provision as to swine-fever (hog-cholera).

The liability of the societies to pay compensation may cease for several reasons. This is generally the case when a pig falls ill or dies in consequence of its being ill-treated or neglected. Other reasons for loss of the right to compensation are the death of the animal being caused by war or revolt (2 societies), by lightning (1 society), by fire (8 societies), by tuberculosis (1 society), by non-compliance with the instructions of the veterinary surgeon or where death results in consequence of castration or spaying not done by a veterinary surgeon (3 societies).

In the rules of 4 societies there is a provision that the right to compensation ceases if the owner receives compensation for his loss from the state (in case of swine-fever), from a fire insurance company or some other insurance institution.

NOTICES OF SOME RECENT PUBLICATIONS  
RELATING TO INSURANCE

GERMANY.

KASKEL, (Dr.): Der Einfluss des Krieges auf die deutsche Sozialversicherung (*The Influence of the War on Social Insurance in Germany*). Monatschrift für Arbeiter- und Angestellten-Versicherung. Berlin. September, 1914.

The author briefly considers the influence of the war on social insurance, taking into consideration the existing legal provisions and deals with questions that may arise before disasters; compulsory or voluntary insurance and suspension or otherwise of the payment of premiums in the case of soldiers; and also the questions that may arise later at the moment of the disaster (payment of compensation by means of assistance to soldiers). The author briefly examines the legal position of the funds belonging to the insurance society as its own property and denies the State the right to make use of such funds; admitting the direct assistance of the society (medical assistance etc.) for the benefit of soldiers so as to reduce the consequences of disasters; and holding it advisable that the societies should subscribe to the war loan; and not admitting in any way the right of foreign states to confiscate the funds of the society itself.

## Part III: Credit

---

### GERMANY.

#### LANDSCHAFT OF THE PROVINCE OF SAXONY.

*In honour of the Fiftieth Anniversary of its Foundation (1914), the Landschaft of the Province of Saxony has published a full report, giving the whole history of its action. From that report, entitled: FESTSCHRIFT ZUR FEIER DES 50 JÄHRIGEN BESTEHENS DER LANDSCHAFT DER PROVINZ SACHSEN, 1914, we derive the following information:*

#### § 1. HISTORICAL OBSERVATIONS.

In regard to the objects and general constitution of the Landschafts we must refer our readers to the three articles published on the subject in earlier numbers of this Bulletin (1). In them the reader will find full information in regard to the Landschafts generally and the special conditions that suggested or necessitated their institution: we shall therefore here only say that these important land credit institutions are organized under the form of co-operative societies, but, as they are adapted to the special conditions of the provinces in which they have to work, they vary considerably in other respects in regard to their constitution and working.

The Landschaft of the Province of Saxony is one of those most recently formed, for it was founded in 1864, while other kindred institutions, for

(1) See *Bulletin of Economic and Social Intelligence*, No. 1, Vol. 1, September, 1910 pp. 45 et seqq., November, 1913, pp. 65 et seqq.: and February, 1914, pp. 53 et seqq.

example, the Landschaft of Silesia, date from the second half of the eighteenth century. This may perhaps excite surprise, especially in view of the fact that the Province of Saxony has always had a prominent place among the Prussian provinces, in respect to agriculture, both as regards the systems in use and the yield. It is, however, to be remembered the Province of Saxony as such only came into existence in 1815; all the same, even under the new conditions, half a century had to elapse before the agriculture of the country was in a position to enjoy the great advantages afforded by a completely organized mortgage credit institution.

Among the causes of the delay in the foundation of the Landschaft must be mentioned, in addition to the comparatively recent constitution of the province, also the economic policy of the State, which, in order to hinder an excessive mortgage indebtedness, opposed the foundation of credit institutions; the small indebtedness of landed property in Saxony as compared with that of the eastern provinces of Prussia, which made the institution of a mortgage credit institute here a less urgent matter, the fact that Prussian Saxony was in a more flourishing condition and more open to traffic than the eastern provinces, which made the utilisation of other sources of credit easier, and, finally, one of the most important causes, the fact that large estates, for which alone the Landschafts were first founded, are far fewer in this than in the other provinces of Prussia.

So much said, let us briefly consider the principal phases of the period of preparation for the foundation of the Landschaft.

The first attempts were made in 1830. At that time, for various reasons we cannot and need not here consider, the rate of interest on loans on real estate began to fall. The rate of interest on mortgage, which had been up to that date 5 % and was still higher in the eastern provinces, fell to 4 % in the case of safe investments. Indeed, in some of the more thriving districts it was reduced to  $3\frac{1}{2}$  % and even 3 %; in 1840, some investments of the greatest security were made at the ridiculously low rate of  $2\frac{1}{2}$  %. It was at this date the Prussian Landschafts effected the conversion of their 4 % land bonds to  $3\frac{1}{2}$  %, so as to utilise the remaining  $\frac{1}{2}$  % due by the land holders for the formation of an amortisation fund.

At the time the general conditions of agriculture were rapidly improving, and the soil was being rendered more fertile and the value of the farms was consequently increasing. And not only was this so, but the rapid change to systems of intensive cultivation obliged the farmers to obtain funds to facilitate the change; all of which, naturally, contributed to make the need of organizing credit on mortgage felt. However, the first attempts did not go beyond the plan of constituting a credit institute by which large holdings only were to benefit; the idea of offering small holdings the same benefits was only adopted in the other Prussian provinces in 1840.

The political and popular movements of 1848 put a stop to these first attempts and early schemes, and closed, we may say, the first period of preparation for the Saxon Landschaft, the second period only commencing some years later (1856-1862).

The period from 1849 to 1855 was one of remarkable industrial progress both in Prussia generally and in the province of Saxony.

During these seven years no less than 87 societies limited by shares (spinning, weaving and insurance societies, banks etc.) arose in Prussia, with altogether a capital of 83,000,000 thalers.

This considerable development of industrial life necessarily had important effects on agriculture. The constitution of numerous industrial societies and especially of the railway companies had attracted a large amount of capital: the shares of these societies competed on the exchanges for the favour of large and small capitalists and became serious rivals of those securities up to then exclusively admitted for quotation, that is to say Government stock and land bonds.

Under the pressure of these events the question of the need of credit for landed estates became in its turn one of the most important and urgent for the whole economy of the German nation.

After long discussions and much hesitation, the Central Management of the Agricultural Unions of the Province of Saxony (*Centralkirection der landwirtschaftlichen Vereine der Provinz Sachsen*) decided to present to the provincial Parliament a petition expressing the desires of the agricultural class in regard to credit on mortgage. These desires may be summarised as under:

(a) the foundation of an exclusively provincial credit institute, under the guarantee of all four social classes or eventually of one or other of these classes;

(b) foundation of a Mortgage Bank in connection with the Provincial Mutual Aid Society (*Provinzialhilfsskasse*);

(c) authorization of the issue of unredeemable land bonds to bearer, not on special mortgages;

(d) establishment of a maximum limit for loans (to be paid in land bonds of the Landschaft) for half the estimated value of the holding, and by way of exception for two thirds of the value. In the latter case, however, the difference between half and two thirds of the taxable value must be repaid in instalments during a maximum period of 25 years. The remainder, corresponding with half the estimated value, must be repaid in instalments lasting over an indefinite period;

(e) limitation to 5,000 thalers of the estimated minimum value of the rural holdings or the urban holdings utilised for agricultural purposes, on mortgage of which the institute to be founded may lend;

(f) the rate of interest on the land bonds not to be fixed before publication of the rules; but presumably not to be higher than  $4\frac{1}{2}\%$ .

We shall not here occupy ourselves with the successive postponements, discussions, and adjournments of debate in connection with this proposal: it is enough to say that the year 1862 was reached before anything had been done except that the conviction had now been arrived at that it was impossible to found this Landschaft with State help.

Then a different line was adopted and it was sought to realise the objects contemplated by means of co-operation. And, if before the negoti-

ations were lengthy, they now proceeded to a termination with comparative rapidity. On the immediate initiative of the farmers, through their Central Union, the important matter was repeatedly brought forward. On March 1st., 1862, the Management of the Central Agricultural Union held a special referendum among all the holders of land of a value of not less than 10,000 thalers, in order to ascertain their opinion in regard to the foundation of the new institute. The result was even more favourable than had been anticipated, since as many as 559 landholders, possessing altogether land of a total value of 20,300,000 thalers, answered the summons. In a first meeting it was decided that it was necessary to found the institute on the following lines:

1. repayment in instalments must be compulsory;
2. the holding to be mortgaged must be valued at the estimate made for purposes of the land tax;
3. the institute, in order to arrive at really useful results, must try to reduce the limit of the value of the holdings on which loans might be granted to less than 10,000 thalers.

And in accordance with these principles the rules of the new institute were drawn up and approved by decree of May 30th., 1864. The Landschaft of the Province of Saxony was definitely constituted but under the name of *Landschaftlicher Kreditverband der Provinz Schlesien*.

## § 2. RULES OF THE "LANDSCHAFTLICHER KREDITVERBAND"

Before we consider the development and present situation of this *Kreditverband* it will be well to examine the rules in accordance with which it was founded.

In the first place it was not an institute in public but in private law, recognised as an incorporated body. Its right to issue land bonds to bearer at the uniform rate of 4 % was recognised. It might accept as members all owners of land situated within the province and utilised for agricultural or forestry purposes, the net revenue (*Grundsteuerreinertrag*) of which as calculated for purposes of the land tax was not less than 50 thalers.

The State exercised a right of supervision over the operations of the Institute, through a Government commissioner, who had a right to attend the meetings and to be informed in regard to all the transactions.

As regards the land bonds, a first mortgage had to be passed for half the value of the holding mortgaged to cover the capital lent, the interest, the expenses etc. The bonds were of the value of 1,000, 500, 100, 50 and 25 thalers.

The bonds were secured collectively by the association, in the first place, on the excess revenue, and then on the reserve fund. Every possessor of a land bond had, however, the right to obtain transfer of any of the Landschaft's mortgages, within the limits of his credits.

The revenue of the association consisted in the annual 5 % interest, in the entrance fees (1 thaler per 1,000 lent), in interest lost by prescription etc. Four fifths of the 5 % interest were used for the payment of interest on land bonds; 75 % of the remaining fifth was placed to the amortisation account and 25 % utilised for working expenses.

The cash balance after payment of working expenses etc., was placed to the reserve fund, in the name of the members, until the fund amounted to 5 % of the total loans. Any eventual surplus was to be placed to the members' amortisation account. The members might draw on the reserve fund, but only for the extinction of the last 5 % of the amount of their loans.

This reserve fund served as a guarantee against eventual losses of the association. When the share of any particular member in the reserve fund did not yet amount to 5 % of his debt, he was held responsible to the Landschaft for the rest; he could be called upon to pay the balance within three months.

It is to be observed that the object of this compulsory payment of the balance to meet eventual losses, like that of the reserve fund, was to constitute a kind of substitute for the members' general guarantee (*Generalgarantie*) that existed in the older Landschaften.

The  $\frac{3}{4}$  % entered to the amortisation account of each member, increased by the surplus in excess of 5 % of the reserve fund account, forms what is called the Amortisation Account (*Amortisationskonto*). Last of all we shall say that the value of the land to be mortgaged according to the original rules of the Saxon *Kreditverband* had to be fixed in accordance with the estimate for the land tax (law of May 21st., 1861). However, the value of the holdings was never to be estimated at more than 30 times that of the taxable revenue. The Board of Management, then, within these limits, fixed the value of the holding, and there was no appeal against its decision.

### § 3. THE DEVELOPMENT OF THE "KREDITVERBAND."

#### (a) From 1865 to 1874.

The first thirty years of the existence of the *Kreditverband* of the Province of Saxony, which assumed the name of *Landschaft* in 1887, may be divided into three decades, clearly distinguished from each other and each representing a special phase in the development of the new Institute.

The first of these three periods — from 1865 to 1874 — may be indicated as the "*period of the struggle for existence*" and is characterised by an extremely slow development of the association. This assertion is sufficiently



proved by the following figures relating to the issue of land bonds and the fluctuations in the numbers of the members during this period :

Year	Amount of Bonds Issued (In Marks).	Number of Members
1865 . . . . .	1,480,575	32
1866 . . . . .	179,750	40
1867 . . . . .	668,025	45
1868 . . . . .	719,400	50
1869 . . . . .	366,750	53
1870 . . . . .	54,450	55
1871 . . . . .	38,175	51
1872 . . . . .	209,850	58
1873 . . . . .	781,050	63
1874 . . . . .	210,375	66

The causes of this slow progress are manifold and we must content ourselves here with mentioning the chief of them. First of all, it must be remembered that the Credit Institute, but recently founded, had not yet been able to acquire that recognition which facilitates the increase of business ; and not only was it not yet well known, but it had not yet won the confidence of the public so often deceived by the schemes of interested politicians. To these reasons of a general character we may add some of a financial nature, such as the small amount of funds at its disposal at the time and the excessively low maximum limit fixed for the grant of mortgage loans which was a serious obstacle to the development of its business.

When we further add the effect of the generally unfavourable economic situation, due to the well known political disturbances that characterized the decade 1865-1874, it is not surprising that at the beginning of its career the *Kreditverband* of the Province of Saxony had difficulties to contend with of no light character.

To meet this unfavourable situation, it was decided to amend the fundamental rules so as to favour an extension of the business of the Institute. Among the amendments introduced we shall only mention the successive raising of the maximum limit for loans.

In this connection, the first alteration was made on August 2nd., 1876, when it was fixed at  $\frac{3}{8}$ ths of the value of the holding, and as it was held that the maximum value of the holding corresponded with 30 times the net taxable revenue, the limit was fixed at 18 times that revenue. But not even this seemed enough, and, after new proposals, the Prussian Government, by decree of September 7<sup>th</sup>, 1872, decided that the limit should be

raised to  $\frac{2}{3}$ ths. of the value of the holding, or 20 times the net taxable revenue.

In the meantime, the Central Landschaft of the Prussian States had been founded (*Zentrallandschaft für die Preussischen Staaten*), the rules of which were approved by Decree of May 21st., 1873. The principal object of this institution was to serve as a central organization for the *Landschaften* for the issue and circulation of land bonds. The "*Landschaftlicher Kreditverband*" of the Province of Saxony also affiliated itself to the new institution, but, during its first working year, the *Zentrallandschaft* had not to issue land bonds for its account.

(b) From 1875 to 1884.

The decade from 1875 to 1884 is marked by the very decided development of the Saxon *Kreditverband*, now definitely and firmly established.

As we know, the Prussian Savings Banks transact mortgage credit business on a large scale. The table we reproduce below shows the amount of the mortgage credit business transacted in the ten years 1875-1884 in the Province of Prussian Saxony by the *Kreditverband* and the Savings Banks respectively (in millions of marks).

TABLE I. — *Land Credit Operations*  
of the "*Kreditverband*" and the Savings Banks: 1874 to 1884.

Year	Mortgage Loans Granted by the <i>Landschaftliche Kreditverband</i>		Mortgage Loans Granted by the Savings Banks	
	Amount of the Mortgages at the End of the Year	Annual Increase	Amount of the Mortgages at the End of the Year	Annual Increase
Millions of Marks				
1874 . . . . .	4.35	—	43.71	—
1875 . . . . .	6.48	2.13	49.57	2.86
1876 . . . . .	7.90	1.42	54.10	7.53
1877 . . . . .	8.59	0.69	58.92	4.82
1878 . . . . .	9.00	0.41	63.16	4.24
1879 . . . . .	10.07	1.07	67.27	4.11
1880 . . . . .	12.70	2.72	71.76	4.49
1881 . . . . .	15.81	4.02	77.19	5.43
1882 . . . . .	20.83	4.02	83.09	5.90
1883 . . . . .	24.76	3.93	89.20	6.11
1884 . . . . .	29.46	4.70	97.05	7.85

From these figures we see clearly the considerable place the *Kreditverband* was gradually and firmly acquiring in respect to mortgage credit

business in the country ; in 1874 the mortgage loans granted by it represented hardly 9.06 % of the total mortgage loans granted by it and the Savings Banks together ; in 1884 the percentage granted by it had risen to 23.3 %. But from the above figures we see further that the mortgage debt on land in the province rapidly increased during the ten years ; indeed it was just about 1875 the land crisis began which only terminated about 1900. The increase in the revenue from land in Germany which had been characteristic of the period 1850-1875, was arrested about this date the prices of agricultural produce fell and continued to fall rapidly and there was also a marked tendency towards the reduction of leases. The fall in prices was largely due to importation from America and Russia. Notwithstanding this, the value of the land continued to rise, partly owing to the increased investments in land consequent upon the crisis of 1873, partly owing to the increased fertility of the farms due to improved methods of cultivation. But the increased price of land led to an increase in the mortgage debt, because often the purchaser had not the necessary capital for the purchase. Under these circumstances, it may perhaps excite surprise that the *Kreditverband* was not called upon to assist more extensively than we have seen it did in providing capital ; it is, however, to be observed that not only were there other sources in the province whence credit could be obtained but also not even at this date was the *Kreditverband* sufficiently known. But what perhaps more than anything else hampered the development of the work of this institute was the maximum limit for loans fixed in the rules, which, although modified, as we have seen, did not yet satisfy the demands of the borrowers. Accordingly it was decided again to amend the Rules.

The most important amendment, approved on October 27th., 1880, provided that, while the former provisions remained unaltered as regards the determination of the value of the holding (30 times the taxable revenue), and while  $\frac{2}{3}$  of this value (20 times the taxable revenue) was kept as the maximum limit for loans, it was permitted, when the Management judged advisable or when the borrower desired a loan in excess of the above limit, to proceed to a new valuation of the holding and raise the estimated value, if possible, to 36 times the taxable revenue. And so the maximum limit, while remaining  $\frac{2}{3}$  of the value of the holding would be raised to 24 times the taxable revenue.

(c) *From 1885 to 1894.*

On June 29th., 1889 the *Kreditverband*, the name of which had been changed to *Landschaft* in 1887, so as to harmonize with those of the analogous institutes of the Prussian provinces, completed its twenty-fifth year. The general situation was excellent, and tended more and more to improve. The *Landschaft* had at that date a balance of mortgage loans amounting to about 50,000,000 marks. But its subsequent progress was considerably more rapid. In the ten years 1885-1894 land bonds were issued to the amount of 46,500,000 marks, giving an average of 4,500,000 marks a year,

as against an average of 2,500,000 marks for the previous ten years and hardly 500,000 marks in the first decade.

TABLE II. — *Land Credit Operations of the "Landschaft" and of the Savings Banks: 1884 to 1894.*

Year	Loans on Mortgage Granted by the Landschaft		Loans on Mortgage Granted by the Savings Bank-	
	Amount of Mortgages at the End of the Year	Annual Increase	Amount of Mortgages at the End of the Year	Annual Increase
	Millions of marks			
1884	29.46	—	97.85	—
1885	31.64	2.18	107.51	9.66
1886	37.13	5.49	118.78	5.77
1887	40.99	3.86	118.24	5.46
1888	45.87	4.88	118.86	0.62
1889	51.34	5.67	125.10	6.24
1890	58.53	6.79	131.94	9.84
1891	59.84	1.31	142.81	7.37
1892	63.01	3.17	150.82	8.01
1893	67.02	4.01	156.08	5.26
1894	70.43	3.41	162.39	6.31

In regard to the rate of interest we may say that about this date it was  $3\frac{1}{2}$  or 3%. In 1885 the *Zentrallandschaft* had already issued for the account of the Saxon *Kreditverband* land bonds to the amount of 1,500,000 marks at  $3\frac{1}{2}$ %, in the next year a new issue was made at 3%. This tendency towards lower rates of interest was so marked that the bonds issued at 4% were later on converted into  $3\frac{1}{2}$ %. So it may be said that at the end of the third ten years (1885-1894) the type of land bonds, whether issued by the Saxon *Landschaft* or by the *Zentrallandschaft* for its account was that of  $3\frac{1}{2}$ %. This is confirmed by the following figures for the end of 1894 (in millions of marks):

3	½ %					land bonds issued by the Zentrallandschaft . . .	57.2
3	¾ %	"	"	"	"	"	5.4
3	½ %	"	"	"	"	Saxon Landschaft . . .	4.3
4	¾ %	"	"	"	"	"	3.4
4	¾ %	"	"	"	"	Zentrallandschaft . . .	0.2

To complete our remarks on the work of this Landschaft during the third ten years of its existence we shall briefly mention the important additional alterations introduced into the rules during this period.

In the ten years 1885-1894 the rules were amended three times in succession, in 1887, in 1889 and in 1893. We shall only mention the changes made in 1887, as they alone were really important.

In the first place it must be remembered that in that year the rules were completely revised so as to bring them into conformity with those of the other Landschafts of the Kingdom of Prussia. Among other changes introduced at that date we must mention a further extension of the maximum limit for loans, that could henceforth be granted up to  $\frac{2}{3}$  of the amount of the value of the holding. This value was simply fixed at 30 times the taxable revenue. If, as a result of a special estimation, it was found that the value of the holding was higher than that fixed for purposes of the land tax, the maximum limit might be raised to 24 times the taxable revenue. Further, in exceptional cases, when improvements had been undertaken on the holdings such as to increase their value considerably, when the value of such holdings was shown to be not less than at least 50 times the net taxable revenue, the Management of the Landschaft might grant loans up to 30 times that revenue. Finally, we must further mention that, in 1887, the new rules allowed the formation of a new capital of the Landschaft's own, as in the case of the other Landschafts. We shall note here in passing that this fund, approved in 1887, amounted in 1891 to 66,300 marks and in 1913 to 2,708,000 marks.

(d) *From 1895 to 1913.*

The next period also (1895-1913) is of quite special interest, because characterised perhaps more than the others, by the influence the general economic and financial conditions have had on the Landschaft under consideration.

We shall mention here, in this connection, three principal events, the conversion effected in 1895, the new issue of 4 % bonds in 1908 and, finally, the important modifications of the rules (for the most part made also in the rules of the other Landschafts).

In reference to the first of these three facts, we shall say that the period of abundant supply of money, lasting up to 1896, induced both the State and the private institutions to lower their rate of interest on loans. And the Landschaft of the Province of Saxony also profited by the situation converting its  $3\frac{1}{2}$  % bonds to 3 %.

The period from 1890 to 1900 was marked by an enormous development of German industry and exportation of industrial produce. This naturally created a great demand for money; it is enough to point out that, during the five years 1895-1900 alone, the value of the securities placed on the German market exceeded the enormous figure of 12,000,000,000. Of necessity this abnormal situation affected the rates of interest and discount; the official rate of the Imperial Bank was raised to 7 %.

in 1899. These facts of course had their influence on the price of the land bonds of the Landschaft, and Zentrallandschaft; so much so that, for example, the price of the 3 ½ % bonds of the Saxon Landschaft, which on January 1st., 1895 were quoted at 104.50, in 1900 varied between a maximum of 97.75 and a minimum of 91.

The crisis of 1901 caused a new general reduction of the rate of interest, so that in 1904 the price of the bonds of the Landschaft of the Province of Saxony varied between a maximum of 101 and a minimum of 99. But the severe crisis occurring in 1907 again reduced the price of the bonds of the Landschafts; and those issued by the Landschaft of the Province of Saxony were not exempt. So we find that in that year the price of the bonds was again reduced to between 95 ½ and 90 ¼, to the serious loss of the institute issuing and the holders of the bonds. But the Management of the Landschaft could do very little to arrest this reduction of prices, which was due to causes of a general nature. The high price of money counselled and even imposed the issue of bonds at a higher rate; and the *Deutsche Hypothekenbank* had already issued some at 4 ½ %. The Landschaft of the Province of Saxony followed this example and issued a new type of bonds at 4 %.

It is not our affair to show here the effect of the agricultural crisis, to which we have already referred and which were fully discussed in a Conference organised by the Department of Agriculture in 1894. We shall limit ourselves to showing the practical effects of this Conference on the work of the Landschaft, especially in new amendments of the rules.

We shall note the most important of these, that of 1896, by which the smaller holdings were admitted to the benefits of the Landschaft, as the net minimum revenue the farms had to have before they could be mortgaged to the Institute was reduced from 150 to 90 marks. This meant that the Landschaft became considerably more democratic.

In 1898 the work of the Landschaft was completed by the foundation of the *Landschaftliche Bank* of the Province of Saxony. The object of this institute is to facilitate the development of the Landschaft, occupying itself, according to the example of similar banks founded in connection with some other Landschafts, with credit and banking business, in connection with the loan business of the Landschaft, and serving as an intermediary for the purchase and sale of land bonds and, finally, granting personal credit, supplementary to the credit granted by the Landschaft, by means of operations in current account, anticipations on amortisation accounts etc.

The capital of this bank is now 3,000,000 marks, of which 2,225,000 marks have been supplied by the Landschaft.

In the fifteen years of the existence of this Bank, as many as 749,000 marks have been paid in to the administration fund of the Landschaft by it. It has also formed an ordinary reserve fund of 273,217 marks and a special reserve fund of 153,510 marks.

But the work of the Landschaft of the province of Saxony has not only become more intense, it has extended also in respect to the territory in which it works. In fact, in 1909, the Duchy of Anhalt was included in the

territory of its legal district and in 1911 the Duchy of Saxe-Altenburg was similarly included.

Finally, the years 1911 and 1913 were characterized by new and important modifications in the working of the Landschaft, modifications tending more and more to enable small holdings to benefit by this institution. As previously mentioned, the largest concession made in favour of small holdings, in regard to their participation in the benefits of the Landschaft, was that of 1896, when the minimum revenue required for the holding benefiting by the Landschaft was reduced to 90 marks. In 1913 it was further decided that even rural holdings (*Landgüter*) having a net taxable revenue of less than 90 marks could contract loans with the Landschaft provided they could be considered as autonomous farms (*selbständige Ackerbauern*), that is to say that their owners derived their principal revenue from the farming of them. Otherwise the limit remained fixed at 90 marks.

#### § 4. THE PRESENT POSITION.

To give an idea of the continually increasing importance of the mortgage credit business of the Landschaft, not only in its total amount, but above all in comparison with that done by other institutions (and principally by the Savings Banks), we shall give here the following figures:

TABLE III. — *Land Credit Operations of the "Landschaft" and of the Savings Banks: 1894 to 1913.*

Year	Mortgage Loans Granted by the Landschaft		Mortgage Loans Granted by the Savings Banks	
	Amount of Mortgages at End of Year	Annual Increase	Amount of Mortgages at End of Year	Annual Increase
(Millions of Marks)				
1894 . . . . .	70.73	—	162.39	—
1895 . . . . .	80.43	10.00	168.87	6.48
1896 . . . . .	86.62	9.19	176.67	7.80
1897 . . . . .	95.70	6.08	188.68	12.01
1898 . . . . .	98.76	3.06	198.52	9.84
1899 . . . . .	100.41	1.65	207.19	8.67
1900 . . . . .	102.77	2.36	211.00	3.81
1901 . . . . .	107.77	5.00	214.71	3.71
1902 . . . . .	115.80	8.03	218.02	3.31
1903 . . . . .	121.33	5.53	221.76	3.74
1904 . . . . .	132.21	10.88	230.33	8.57
1905 . . . . .	141.46	9.25	237.72	7.39
1906 . . . . .	150.58	9.12	243.78	6.06
1907 . . . . .	158.15	7.57	245.66	1.88
1908 . . . . .	163.76	5.61	245.70	0.04
1909 . . . . .	172.60	8.84	246.10	0.40
1910 . . . . .	190.30	17.70	252.07	5.97
1911 . . . . .	201.86	11.56	258.92	6.85
1912 . . . . .	228.00	26.14	261.19	2.27
1913 . . . . .	244.35	16.35	—	—

We must, however, here observe that the development of mortgage credit granted by the Landschaft in recent years does not imply an increase of the burden on land, such as we had occasion to observe at an earlier period. The advantages of the credit offered by the Landschaft are now so evident to the landowners that many of them prefer to have recourse to this institute rather than to other establishments or to private persons, in order to obtain the sums they require for the extinction of earlier mortgages, as is seen in the following table:



TABLE IV. — *New Loans for Repayment of Debts: 1895 to 1913.*

Year	Total Amount of Loans Granted by the Landschaft — Millions of marks	Amounts Utilised for Repayment of Earlier Mortgages		New Loans	
		Millions of Marks	%	Millions of Marks	
1895 . . . . .	10.38	5.83	56	4.55	4
1896 . . . . .	10.97	7.14	65	3.83	3
1897 . . . . .	7.61	4.58	60	3.03	2
1898 . . . . .	5.55	1.80	34	3.66	6
1899 . . . . .	3.51	1.27	36	2.24	6
1900 . . . . .	5.18	2.96	57	2.22	4
1901 . . . . .	5.38	2.42	45	2.96	5
1902 . . . . .	8.29	5.83	70	2.46	3
1903 . . . . .	6.29	3.62	58	2.67	4
1904 . . . . .	11.34	6.72	59	4.62	4
1905 . . . . .	10.07	5.82	58	4.25	4
1906 . . . . .	10.17	4.55	45	5.62	5
1907 . . . . .	8.81	5.28	60	3.53	4
1908 . . . . .	7.10	3.13	44	3.97	5
1909 . . . . .	11.41	6.33	55	5.08	4
1910 . . . . .	19.98	10.22	51	9.76	5
1911 . . . . .	13.79	7.34	53	6.45	4
1912 . . . . .	27.50	18.82	68	8.68	3
1913 . . . . .	18.88	11.37	60	7.51	4
	202.21	115.12	57	87.09	4

With regard to the number and area of the holdings mortgaged by the Landschaft, we reproduce the following table which shows to what degree small and medium sized holdings have already profited by its assistance.

TABLE V. — *Distribution of Holdings Mortgaged to the Landschaft at the End of 1913 according to Area.*

Area of Holdings	Number of Holdings	Total Area	Net Taxable Revenue
Hectares		Hectares	Marks
.....	134	473	23,949
10 .....	977	11,600	509,798
50 .....	936	30,764	1,255,233
100 .....	484	32,777	1,356,600
150 .....	250	29,657	998,718
200 .....	316	168,352	4,290,057
Total .....	3,097	273,623	8,425,957

With regard to the fluctuations in the number of members in recent years we have the following figures for the period 1909-1913:

1909 .....	2,466
1910 .....	2,616
1911 .....	2,712
1912 .....	2,920
1913 .....	3,056

Let us close these remarks on the Landschaft of the Province of Saxony with an indication of the other sources of mortgage credit in this province, giving some figures that will permit of profitable comparison of the importance of these sources and that of the Landschaft.

We shall mention here only the most important, namely the Savings Banks, Mortgage Banks, fire and life insurance societies and the public institutes. We shall say nothing of the savings banks, because, in respect of them we have already given some figures that will serve for purposes of comparison.

The German Mortgage Banks have exerted most of their action in connection with urban mortgage credit (94 %) and only recently have they begun to do rural credit business (6 %). This is true also with regard to the province of Saxony. Altogether the 14 Prussian or other (Thuringian) mortgage credit institutes have conducted operations in the province of Saxony for no more than 13,750,000 marks, of which most have been conducted by the Central Prussian Mortgage Credit Society (*Preussische Central-Bodenkredit-Aktiengesellschaft*).

The life and fire insurance societies did rural mortgage credit business in the Province of Saxony for about 4,750,000 marks in 1912.

We shall finally mention that the other public institutes, such as the *Feuersozietäten* of the Province, the Insurance Institute (*Landesversicherungsanstalt*), etc., altogether conducted mortgage operations in the Province of Saxony to the amount of about 11,500,000 marks in 1912. To sum up, we shall say therefore that, of 555,780,000 marks, representing the mortgage credit granted in 1912 in the Province of Saxony 244,350,000 marks were granted by the Landschaft, 261,190,000 marks by the savings banks, 13,790,000 marks by mortgage banks, 11,640,000 marks by public institutes, 4,730,000 marks by insurance companies and the rest, 24,280,000 marks, by private persons or smaller credit institutions.

## ITALY.

### 1. THE NEW PROVISIONS IN REGARD TO AGRICULTURAL CREDIT IN ITALY.

With the object of helping Italian agriculturists to overcome their present difficulties and also to meet the views long since expressed by agricultural associations and delegations, a series of provisions tending to open up new branches of agricultural credit were put forth in a Royal Decree of October 11th., 1914, No. 1,089 (1).

The principal provisions were as follows.

Ordinary savings banks and co-operative credit societies administering a capital of at least three million francs, made up of their share capital and deposits, are authorized, until the end of the year 1915 and notwithstanding anything in their rules to the contrary, to utilise a total sum not exceeding a quarter of their share capital for agricultural credit operations; this credit may be used for the following ends:

(a) The purchase, individual or collective, of seeds, manure, anti-typtogamic materials, remedies or insecticides and implements for the cultivation of the soil, the treatment and preservation of agricultural products.

(b) For expenses in connection with the work of sowing, ploughing, harvesting, and the first treatment of agricultural products.

(c) For advances upon pledge of agricultural products placed in general warehouses or other places of deposit guaranteeing their preservation under the good management, of whatever character, of the lending institutes, societies, private associations and public administrations.

In order especially to meet the requirements of the viticulturists, the decree very opportunely provides that the credit institutes may also make advances upon pledge of agricultural products *deposited in private storehouses* offering the above security. But in this case the institutes have the right and the duty themselves to close these storehouses. The Minister of Agriculture, Industry and Commerce is also authorized to

(1) See the "Gazzetta Ufficiale del Regno d'Italia", Rome, No. 214, October 11th., 1914. This Decree has been presented to Parliament in order that it may become law.

order the constitution and immediate working of special warehouses for the deposit of agricultural products or other merchandise (1).

The above mentioned operations will be effected by means of commercial bills, for terms of not more than one year, the rate of interest on which must not be more than the official rate.

To guarantee the Institutes mentioned and those already authorized by special laws to give agricultural credit, a special preference claim has been established, in the case of loans not otherwise privileged, in regard to the products of the current year, and if the harvest is bad, the products of the following year, and this is decided at the time when the loans are granted.

This preference takes precedence of any other claims in respect to the things themselves, except those for legal expenses.

Further, during the whole of the year 1915, the decree authorizes the agricultural credit institutes legally constituted, independently of their rules to accord *direct* loans to agriculturists in those localities where "*monti frumentari*" and agricultural banks do not exist or are not working, and temporarily to take over the management of the "*monti frumentari*" and the agricultural banks which do not show profits in their working.

Power has also been given to the Savings Bank of the Bank of Naples to devote the funds of the Provincial Banks of Agricultural Credit which it administers (3), exceeding the needs of a single province, to agricultural credit operations in other provinces where the amount allotted to their respective agricultural banks is insufficient.

And again, independently of the provisions of the laws of July 7th., 1901, No. 334 and of March 29th., 1906, No. 100 (4), the institutes of issue are

(1) For all the advances upon pledge of agricultural products mentioned in this decree, if the debtor does not pay on the day specified for payment or if the products deposited show signs of deterioration and the debtor does not settle his debt within seven days from the date on which he is called upon to pay by means of a registered letter, the lending Institute has the right to have the security sold without the usual legal formalities according to the method established by the Italian Commercial Code in articles 477, 478 and 479 regarding voluntary or forced sale by public auction of articles deposited in general warehouses.

(2) That is to say a legal privilege established by article 1,958, No. 5, of the Italian Civil Code extended to the loans in relation to manures and anti-cryptogamic materials by law of July 7th., 1901, No. 334, article 5, and confirmed by the laws of March 29th., 1906, No. 100, article 23 and of July 6th., 1912, No. 802.

(3) See our article upon this subject: *The Provincial Agricultural Loan Banks and the Law of February 2nd., 1911*, in the Bulletin for April, 1911, page 223.

(4) The law of July 7th., 1902, No. 334, authorized the Savings Bank of the Bank of Naples to employ gradually two tenths of its deposits in operations of agricultural credit with the Consortiums and the institutes legally constituted, having their headquarters and working in the Provinces of Aquila, Avelino, Bari, Benevento, Campobasso, Caserta, Chieti, Foggia, Lecce, Salerno, Teramo, Cagliari, and Sassari.

The law of March 29th., 1906, No. 100, instituted a department of agricultural credit at the Bank of Sicily, with an initial fund of 3,000,000 frs., furnished by the Bank of Sicily, of an advance in current account at interest made by the Vittorio Emanuele Central Savings Bank for the Sicilian Provinces of Palermo, up to an amount of 2,000,000 frs. and not exceeding, in any case, two tenths of the savings deposits of the Bank, and of three tenths of the deposits of the Savings Bank of the Bank of Sicily.

authorized to *re-discount* the paper of the agricultural credit institutes considered in the decree in question, in accordance with provisions which will be published in special decrees.

The discount rate will be 1 % less than the official rate.

But in order that the above loans may really benefit the farmers the conditions on which they are granted must not be too burdensome, the decree makes provision for this by granting complete exemption from income tax and registration and stamp duty as well as mortgage dues in the case of all operations effected by the above Institutes, as well as a reduction by half of the taxes on legal documents rendered necessary through the debtors not fulfilling their contracts.

As we have said the new provisions in favour of agricultural credit we have just dealt with satisfy, though indeed their effect is limited to the year 1915, most of the desires recently expressed by the Italian agricultural delegations and without doubt open the way for useful and effective efforts. We shall consider the results in due course.

## 2. MISCELLANEOUS INFORMATION.

I. — THE BALANCE SHEETS OF THE ORDINARY SAVINGS BANKS. — On December 31st., 1912, the number of the ordinary savings banks working in Italy was 186. At that date, their capital amounted to 338,869,641 frs. (1). It consisted of the total endowment funds, amounting to 1,575,098 frs., reserve funds amounting to 294,598,011 frs., a reserve fund to meet depreciation of securities and eventual losses amounting to 28,916,448 frs., and other funds amounting to 13,780,084 frs.

The total debits of the 186 banks amounted to 2,779,604,619 frs., that is to say : savings deposits and interest bearing bonds, 2,533,192,041 frs.; deposits in current account 63,260,992 frs.; debts to correspondents 14,024,604 frs., debit current accounts 9,534,100 frs., amounts borrowed on security of real estate belonging to the institutes 22,528,371 frs., debit balances from the preceding year 53,254,739 frs.; rediscounted commercial bills 15,229,923 frs.; miscellaneous debits and liabilities 68,579,858 frs.

Savings deposits, therefore, make up nearly 91 % of the debits. And if we add to this amount of 2,533,192,041 frs. the 63,260,991 frs. deposited in current account, the total will be nearly 94 % of the debits.

(1) See, in regard to the situation of the ordinary savings banks on December 31st., 1913, the *Annuario statistico italiano*, 2nd. Series, Vol. III, Year 1913. Ministero di Agricoltura, Industria e Commercio, Direzione Generale della Statistica e del Lavoro, 1914.

It will be interesting to consider the distribution of the deposits collected by the ordinary savings banks, in the various regions of Italy. Of course, the richest and most populous regions take the first place. Thus the largest mass of savings is found in Lombardy, then in Piedmont, Emilia, Tuscany and Venetia, 200,000,000 frs. in each case; then come Campania and Latium with more than 100,000,000 frs. each; Sicily, Marche, and Liguria with more than 50,000,000 frs. each, and, finally, the other regions, with progressively decreasing amounts. The totals are shown in the following little table, the figures representing thousands of frs.:

Lombardy . . . . .	839,572	Marche . . . . .	75,507
Tuscany . . . . .	317,162	Liguria . . . . .	53,782
Piedmont . . . . .	296,630	Umbria . . . . .	33,798
Emilia . . . . .	279,441	Calabria . . . . .	21,722
Venetia . . . . .	222,474	Abruzzi . . . . .	15,600
Campania . . . . .	152,900	Apulia . . . . .	2,843
Latium . . . . .	129,760	Basilicata . . . . .	642
Sicily . . . . .	91,347		

Let us now consider the chief credit items. They make up a total of 3,141,706,502 frs., distributed as follows:

	Thousands of francs	Percentage
Cash . . . . .	35,400	1.1
Treasury Bonds . . . . .	77,075	2.5
State Securities or State Guaranteed Securities . . . . .	1,030,402	33.0
Land Bonds . . . . .	117,243	3.7
Other Securities . . . . .	71,851	2.3
Brought Forward . . . . .	53,283	1.7
Deposited by Other Institutes . . . . .	29,702	1.0
Correspondents . . . . .	25,512	0.8
Advances . . . . .	53,624	1.7
Bills and Acceptances . . . . .	495,957	15.8
Mortgage Credits . . . . .	544,740	17.2
Credits on Notes of Hand . . . . .	412,442	13.1
Special Operations . . . . .	76,670	2.4
Outstanding . . . . .	9,435	0.3
Other Credits . . . . .	107,664	3.4

The largest credit item is that of State or State guaranteed securities. Mortgage credit and current accounts secured on mortgages also form a very important item. In Latium the loans on mortgage represent 33.8 % of the total credits of the Savings Banks. In Tuscany the percentage is 22.9, in Lombardy 21.8, and in Apulia 19.6.

The amount immediately next in importance is that of the bills and acceptances, although the discounting of bills is rather a matter for the ordinary credit institutes than for the savings banks, the latter limiting themselves to discounting bills the payment of which is certain. However, in certain regions, where the banks are not so numerous and where the large institutes have neither their head quarters nor branches, the savings banks substitute them and discount bills to a larger extent. Thus in the Abruzzi, we find, at the end of the year 1912, large amounts for their bills and acceptances, representing 46 % in the total credits. In Umbria they amounted to 41.3 %, in Marche to 40 %, in Apulia to 37.7 % and in Calabria to 30.2 %. It is easy to understand that with the continual progressive extension of the work of the large Italian banks, founding new agencies and branches in every direction, the discount operations of the savings banks will be gradually reduced. What we have said in regard to commercial bills applies equally to the credits on notes of hand, which, as is seen in the preceding table, amounted to 412,442,000 frs. and represent 13.1 % of the total credits of the banks. We shall not delay over the other items of the balance sheets as they offer nothing specially worthy of remark (1).

\* \* \*

2. — THE NEW SAVINGS BANKS BOOKS TO BEARER. — The law of May 27th, 1875, No. 1,775, authorised the Government to issue savings bank books to bearer, in addition to the inscribed books. In order to meet the desires of the depositors and also further to promote thrift by facilitating the operations of deposit and withdrawal, the Government, by the power granted to it, instituted, by decree of December 10th, 1914 (2), books to bearer at the above banks, in accordance with the following regulations:

The right to issue savings bank books to bearer is confined to the principal post-offices.

The amounts paid into the books to bearer shall bear interest during the year 1915 at 2.52 % per ann., free of income-tax.

(1) In regard to the distribution of the ordinary savings banks in Italy and the fluctuations in the amount of deposits in the first half year of 1913, see the *Bollettino delle Casse di Risparmio ordinarie*. Ministero di Agricoltura, Direzione Generale del Credito e della Previdenza, Rome, 1914.

(2) See the *Gazzetta Ufficiale del Regno d'Italia*. Rome, No. 205, December 22nd, 1914.



The holder of the book shall be able to withdraw the whole amount in the book or any part thereof on simple presentation of the book. Repayment will be made at sight in case of amounts of less than 200 frs., and on ten days' notice in that of amounts up to 500 frs.; for larger amounts a month's notice is required. Not more than 500 frs. can be withdrawn at sight within a period of ten days; the amount of the repayments that can be made on notice must eventually be reduced by the amounts withdrawn after notice given.

Deposits in current account in other offices than that in which the application is presented cannot be withdrawn before the office paying has received confirmation of the credit from the Central Administration.

The reader will not have forgotten that by a recent law the maximum limit of savings deposits bearing interest was raised from 4,000 to 6,000 frs. This measure had two objects: it was, in the first place, intended to offer an investment for the average economies, which, if less profitable, would be more prudent and more secure than any other, and, in the second place, the economic resources of the State were increased, as it was enabled by the collection of a larger quantity of savings to give greater assistance to the administrations (Communes, Provinces, Benevolent Institutions and Land Reclamation Consortiums) which, for the purpose of carrying out works of public utility, apply for funds to the Postal Savings Department as well as to the National Workmen's Old Age and Disablement Insurance Society, to which is assigned the greater part of the interest obtained by the work of the Savings Banks, and the highly benevolent object of which is recognised by all.

The alteration made with regard to the maximum limit of savings deposits bearing interest (fixed at first at 2,000 frs.) caused a considerable increase in the amount of the deposits, so that the total credit of the depositors gradually increased from 45,000,000 frs., in the earlier years of the life of the postal savings banks, instituted in 1875, to 710,000,000 frs. at about the end of 1901, until it reached 1,500,000,000 frs. in 1909 and exceeded 2,000,000,000 frs. in 1913. To show how large the amount of the deposits in the savings banks is as compared with that in other Italian institutes collecting savings, we give the following table (1) which furnishes statistics for the period between June 30th., 1909 and June 30th., 1913. The amounts represent millions of frs.

(1) See the *Financial Statement of the Treasurer General*, Signor FRANCESCO TEDESCO, laid before the Chamber of Deputies on December 20th., 1913. Rome, Bertoldo, 1913.

Institutes	1909	1910	1911	1912	1913
Of Issue . . . . .	100.8	99.2	110.3	91.7	100.3
Of Ordinary Credit . . . . .	790.7	869.7	946.3	999.5	1,010.9
People's Banks. . . . .	653.2	699.7	710.5	701.4	687.1
Co-operative Banks. . . . .	389.6	444.3	505.1	509.8	485.8
Ordinary Savings Banks . . . . .	2,323.6	2,460.1	2,555.2	2,575.9	2,649.6
Postal Savings Banks. . . . .	1,492.5	1,657.1	1,821.0	1,874.4	1,984.9
Pawn Establishments. . . . .	83.4	188.0	196.3	199.3	199.8
Rural Banks. . . . .	62.2	72.6	89.2	99.2	101.6
	5,896.4	6,490.7	6,934.1	7,051.5	7,220.4

On December 31st., 1913, the amount of the deposits in the postal savings banks exceeded two thousand million francs (2,901,547,476 frs.).

It follows then from an examination of the figures for each group of institutes that, in the five years' period under consideration, it is in the Postal Savings Banks there has been the largest increase of credit. In the period 1909-1913, the deposits collected by them increased indeed by 492,400,000.

NOTICES OF SOME RECENT PUBLICATIONS  
RELATING TO CREDIT.

PORTUGAL.

JUNTA DE CRÉDITO AGRÍCOLA. RELATORIOS E CONTAS DE IERENCIA (*Agricultural Credit Junta, Reports and Balance Sheets*). Lisbon, 1914. National Press. 67 pages.

We have already dealt in this Bulletin with the Portuguese Agricultural Credit Junta, instituted for the encouragement of agricultural credit in general and especially for the foundation and development of mutual agricultural credit banks, and, at the same time, we examined the first report of this commission. The publication we shall now deal with is the second report and it is of special importance as the results of the work of the Junta begin to be seen in it.

In view of the importance of the matter of agricultural credit for Portuguese rural economy and the abundance of information included in the report under consideration, we shall devote an article to the subject in an early number of our bulletin in which we shall be able to treat the matter more at length than is possible in a brief notice of this kind.

We shall therefore limit ourselves now to stating that during the year 1913-1914 to which the report refers, 11 agricultural mutual banks were founded, all with unlimited joint and several liability of members, so that, with the 26 others previously founded, there are now altogether 37 of these banks working.

In regard to the influence exerted by these institutions in the regions in which they work the report attributed to it the following results :

- (1) A reduction of the rate of interest charged by private lenders to the maximum rate charged by the banks, that is 5 % ;
- (2) the facilitation of business and higher prices for produce ;
- (3) the extension of the area under cultivation and an appreciable improvement in agricultural methods.

## Part IV: Miscellaneous

### BELGIUM.

#### THE LAND SYSTEM, AGRICULTURAL LABOUR AND LABOUR CONTRACTS IN THE BELGIAN CONGO.

##### OFFICIAL SOURCES :

ANNUAIRE STATISTIQUE DE LA BELGIQUE ET DU CONGO BELGE: Année 1913 (*Statistical Year-Book of Belgium and the Belgian Congo*: 1913). Brussels, A. Lesigne, 1914.

L'AGRICULTURE DU CONGO BELGE. Rapport sur les années 1911 et 1912 présenté à M. J. Renkin, Ministre des Colonies, par le Directeur général de l'Administration de l'Agriculture au Ministère des Colonies. (*Agriculture in the Belgian Congo. Report for 1911 and 1912, submitted to M. J. Renkin, Minister of Colonies, by the Director General of the Administration of Agriculture at the Ministry of Colonies*) From the "*Bulletin Agricole du Congo Belge*", Brussels, N° 1, March, 1913.

DOCUMENTS POUR LE SERVICE DE L'AGRICULTURE ET POUR LES COLONS AGRICOLES (*Documents for the use of Agriculture and Farmers*). Brussels, Industrial and Financial Printing Press, 1913.

##### OTHER SOURCES :

DE LANSOY (Charles) : L'organisation coloniale belge (*Belgian Colonial Organisation*). Brussels, Lamertin, 1913.

BRASSEZ DE IBERO (C.) : La mise en valeur du Congo belge (*The Utilisation of the Belgian Congo*). Paris, Recueil Sirey, 1913.

VAN DER LINDEN (Fritz) : L'avenir du Congo belge (*The future of the Belgian Congo*). In the "*Revue Économique Internationale*", Brussels, N° 2, May 15th-20th., 1914.

VANDERVELDE (E.) : La Belgique et le Congo (*Belgium and the Congo*). Paris, Alcan, 1911.

In writing on the Belgian Congo it is not our intention to relate the history, rich in lessons, of the several phases and vicissitudes through which this colony has passed before reaching its present status (this history

is well-known and has recently been written by Emile Vandervelde) (1), but to give a brief account of the land system of the country and of the solution given to the two problems of agricultural labour, and labour contracts which are among the most arduous and delicate in colonial administration.

The area under Belgian sovereignty since 1908 amounts to about 2,365,000 sq. km. It is divided into twenty-two districts which are again subdivided into zones, sections, stations and native chieftainships, or districts placed under a native chief, amounting in all to 3,642.

The native population is calculated at 15 million, mostly belonging to the Bantu tribes. On January 1st., 1912, there were 5,465 foreigners in the Colony, almost all (3,307) of whom were Belgians.

The Colonial government in the mother-country is headed by the King, assisted by a Colonial Minister responsible to Parliament. The King exercises the legislative power by means of decrees, except in matters regulated by law, and the executive power by means of regulations and ordinances. A colonial council, consisting of 14 members and presided over by the Minister of Colonies, deliberates on the questions submitted to it from time to time.

In the Colony the King is represented by a Governor-General, assisted by one or more vice-governors, and by a certain number of directors placed at the head of the more important administrative services. The judicial authority is in the hands of an attorney-general, who represents the Colonial Minister in the exercise of executive power in judicial matters.

The Governor General exercises the executive power entrusted to him by means of ordinances, and although he cannot legislate, he is authorised, in case of urgent need, to suspend temporarily the execution of given decrees, and to issue ordinances having the force of law. Since 1913 he is also entrusted to elaborate, with the assistance of a special commission, a scheme for a local budget, which may serve as a basis for drawing up the final budget. The budget is submitted year by year to the Legislative Chamber, along with a report on the administration and general situation of the Colony. The Chambers vote the estimates, and pass the general statement of expenditure for the previous year, after it has been approved by the Auditing Court.

Having stated these preliminary facts, we will now get to our subject.

## § I. THE LEGAL CLASSIFICATION OF LAND.

In studying the land-system of the Colony it must first be noted that all land is officially classified under three categories: 1, registered land the private property of the non-natives; 2, land held by natives in which they have a right of occupation; 3, crown lands, including vacant lands.

(1) See: VANDERVELDE EMILE: *Le Belgique et le Congo, le passé, le présent, l'avenir*. Paris, Alcan, 1911.

and those administered by the State. We shall briefly examine these three categories.

I. — *Registered Holdings*: They are the only ones held in fee simple by private persons. They comprise: (a) land to which non-natives had acquired title before July 1st., 1885, date of the establishment of the Congo Free State; (b) land ceded to private persons by natives or by the Administration of Crown Lands, in due legal form.

The exercise of the right of property is subject to registration, a formality which consists in entering an accurate description of the estate in a special register, indicating its juridical status, and the servitudes and charges of every description to which it is subject. A certificate, containing the particulars inscribed in the land register, is handed to the owner (ordinance of November 8th., 1886). All subsequent transactions modifying the juridical status of the estate must likewise be registered. Registration is the sole formality required for the legality of any contract dealing with real estate (sale, transfer, lease, etc.). As a rule, the keeper of the land register himself witnesses agreements and contracts are drawn up in his presence. But in the absence of the parties to the contract the registrar can register same on the presentation of an authenticated deed (Ordinance of February 23rd., 1906).

The system above described (1) has the double advantage of simplicity and safety. As the registration certificate is transferable, the transfer of real estate in the Congo is as easy as the transfer of shares in a company. On the other hand, as every alteration in the title to the land has to be inscribed in the land register and recorded on the certificate of registration, this latter contains all the data requisite for drawing up a contract.

Before registration, holdings are generally surveyed by a government surveyor. They are entered in the cadastre on plans drawn up for each commune.

The ordinances and decrees regulating the status of registered land only recognise the right of purchase in foreigners. This right has, however, also been conceded to enrolled or registered natives (2) who enjoy the same civil rights as foreigners.

II. — *Holdings occupied by natives*: In accordance with the decree of June 3rd., 1906, all land inhabited, cultivated, or in any way utilised by natives, by gathering the spontaneous products of the soil, extracting minerals, etc., comes under this category.

Moreover, to allow the natives to continue cultivating the soil according to their own methods, and to encourage them to undertake further cultivation, the above mentioned decree assigns to each village an area

(1) In substance, as the reader will see, this is the Torrens system, first introduced into South Australia by act of July 2nd., 1858, and since extended to other parts of Australia and introduced in Tunis in 1885.

(2) A native is enrolled either directly, at his own request, or by official act, in the registers, or indirectly, by the entry of his birth or marriage in the official records.

three times the size of that occupied or cultivated by it, and this limit may be exceeded. The Governor General is required to determine and take official cognizance of the nature and extent of the rights of occupation of the natives.

As to the nature of these rights, opinions differ owing to the vague wording of the 1906 decree. But according to the prevailing opinion the expression "rights of occupation" merely means, "occupation which may entail obligations of the State towards the natives". According to this interpretation the task of the Administration is reduced to determining the nature of the occupation, that is to say whether it be permanent, temporary, general or restricted, etc.; the natives are never considered as owners, but only as users of the soil, the title to which is vested in the Crown.

But if the 1906 decree does not clearly define the rights of the natives, it does formally recognise their right to the free enjoyment of the land they occupy. They may, therefore, use such land as they please, but they may not part with it to outsiders without the consent of the Governor. This reservation, contained in the legislation of all African colonies, evidently aims at protecting the natives against dishonest European and native traders.

III. — *Crown Lands*: These fall into two groups, 1st., the land purchased by the State for purposes of public utility, the area of which is restricted; and, secondly, vacant land which, at the date of the establishment of the Congo Free State, constituted the major part of the territory.

With reference to the first class it must be mentioned that the State can acquire land in the same way as private parties. It can also have recourse to compulsory expropriation for reasons of public utility. In the usual course of things, expropriation is effected on the strength of a decree, but in exceptional and urgent cases an ordinance issued by the Governor is sufficient. If terms cannot be arranged with the owner, the decree or ordinance of expropriation is made executive by the court, which fixes a fair compensation on the basis of a valuation.

Land is considered vacant when neither registered nor occupied by natives. In declaring it Crown land, the ordinance of July 1st., 1885, simply enforced the principle recognised by art. 539 of the Belgian civil code, according to which "vacant property, without an owner, belongs to the Crown". The vacant land in the Congo is, indeed, without owners, as no private person could show a legal title to lay claim to it, for it is not registered, and no natural title, for it is unoccupied.

Of the Crown lands a portion is withdrawn from commerce, such as rivers, river banks, water-courses, etc., and is not therefore susceptible of being held as private property. The remainder is State property; the land can be utilised by the State as it would be by any private owner; it comes within the domain of commerce, and therefore can be alienated.

## § 2. THE PRINCIPAL RULES REGULATING THE GATHERING OF PLANT PRODUCTS ON CROWN LANDS.

Belgian colonial history can be divided into two different periods and systems as far as the economic policy of the Government is concerned. The first, inaugurated in 1891, and rigorously carried out by the Free State, specially after 1901, is characterised by the tendency to reserve exclusively to the State the right of gathering and utilising the natural products of the soil to the exclusion of the natives. The second period dates from the annexation of the Congo to Belgium: the decrees, issued during this first period are inspired by two principles, in the first place the gathering of natural products on Crown lands is left to private enterprise, the State merely receiving a fixed sum in payment, and, in the second place, agricultural, commercial and industrial enterprises are encouraged by selling or leasing the land at a low figure.

The fundamental decree on this subject is that of March 22nd., 1910, which put an end to the system of gathering and utilisation by the State of plant products on Crown lands. Ever since July 1st., 1912, vacant land has been thrown open to private enterprise, with the exception of the forest reservations, covering a total area of 600,000 hectares.

The right of gathering natural products, is, however, subject to certain conditions prescribed by the aforementioned decree, which vary according to the persons and the products. The Congo natives can gather these products on the strength of a general authorisation, without having to make any payment or fulfil any formality. This concession being made in favour of the natives, the right of gathering is subject to a permit which must be procured (a) by those who gather the products personally; b) by those who have them gathered by a native or non-native staff in their service; (c) by those who purchase products gathered by the natives. Although the permit is granted nominally to a specific person, it is understood as granted to the business concern which gathers or receives the products; so that if an individual is connected with several business houses he must obtain a permit for each one of them.

The permit is valid for a year, and is subject to a fee of 250 francs if it covers the right to gather rubber and copal, which are the only natural plant products of notable commercial value for exportation. If, instead, it covers other plant products it is granted free of charge.

To prevent the extinction of the rubber plants the decree of December 31st., 1909, has placed a duty of 40 centimes per kilogram on rubber gathered from trees and creepers on crown lands and of 20 centimes per kilogram on rubber collected from grasses: the revenue thus secured is laid out by the Government on plantations intended to compensate for the impoverishment of the natural sources of production.

The decrees which regulate the gathering of plant products on Crown lands do not contemplate forest products, as, hitherto, they have formed



a negligible factor in colonial trade, and the need has not therefore been felt of systematically organising the utilisation of forests for trade purposes. So far the only measures taken with regard to forests are those which safeguard the rights of the State and prevent their destruction. The regulations now in force are those contained in the decree of July 4th., 1912, regulating the right of felling trees in Crown forests which have not been leased nor granted in concessions. They differ with regards to wood for fuel and timber for building purposes, and may be summarised as follows: every person legally established in the Colony is at liberty to fell, cause to be felled, or purchase from natives, wood for fuel needed for domestic purposes; but he must be provided with a permit, the cost of which varies from a minimum of 50 to a maximum of 1,000 francs, if he wishes to fell or purchase such wood for sale or industrial purposes. Such a permit is not required, as a rule, by natives.

As for building timber, the Congo natives are authorised to fell what they require for their own use. All other persons, however, must secure a permit from the district commissioner, even if the timber is for their own needs. If the timber is for use other than in the erection of buildings for the holder himself, and for the fittings and furniture thereof, a fee of 5 francs must be paid for each cubic metre of timber felled.

### § 3. CONDITIONS FOR THE SALE AND LEASE OF CROWN LANDS.

The sale and leasing of Crown lands is regulated by a royal decree of February 23rd., 1910. It only deals, however, with small areas condition for which may be arranged by the Governor himself without the intervention of the central Government. As, however, the Government wishes to have a uniform system for all its land legislation, the provisions of this decree may be considered as typical of the main outlines of its policy for the cession of Crown lands. Some of the provisions of the decree are applicable to all contracts, others deal exclusively with those touching certain special categories of land. Of the former the most important are

(a) The Colonial Minister decides on the districts in which and the periods for which the Governor General is authorised to sell or to lease Crown lands.

(b) Requests submitted to the Governor must state the use the applicant intends to make of the land.

(c) A lease cannot be made for more than 15 years.

(d) The owner or lessee must, within six months of signing the contract, occupy the land purchased or leased, or place a representative or his on the same. Subsequently, he must take up permanent and effective residence thereon, and personally carry on his trade or industry, or have there as representative a person registered in the Colony. If he fail to take up settled residence there for a period of five consecutive years

case of purchase, or for one year in case of a lease, the land reverts to the Colony, and the payments made thereon are forfeited.

The purchase price and the conditions of the contract vary according to the locality and the use to which the land is to be put. In urban districts land is sold or leased in lots in accordance with a plan and price fixed by the Administration. If there are many applicants, the sale or lease may be adjudged by auction. The lowest price for sale is 1 franc per sq. metre.

Outside of the urban districts and of the stations, that is to say at a distance of more than 3,000 metres from the former and 1,500 from the latter, land is sold or leased in sections of variable size, according to a tariff drawn up by the Governor General.

The price of land intended for farm use is as follows:

(a) For a radius of ten kilometers adjoining urban districts, railways, navigable water-courses, the price is 25 francs per hectare.

(b) Beyond this zone the price is 10 francs per hectare. If, however, the land is intended for industrial use the sale price is 1,000 francs per hectare. This price is also charged for land intended for farms.

Rents are uniformly fixed at 5 per cent. of the sale price.

In the district of Katanga the sale and leasing of land is subject to special regulations issued on May 1st., 1910. These draw a distinction between urban and suburban land, and land used for farms, and special rules are laid down for land set aside for agricultural purposes, the breeding of live-stock, and other agrarian uses. This latter category of holdings is in turn subdivided into three classes:

The first includes land adjacent to the suburban zones, to railways, and to navigable water-courses, or in the neighbourhood of mining centres, specially suited for the raising of crops, planting with orchards, fattening stock, and the dairy industry. These holdings are let or sold in sections from 100 to 200 hectares. The sale price is 25 francs per hectare.

The second class includes land suited for extensive agriculture, stock-breeding, and agricultural industries, situated at not less than 15 kilometres from the outer edge of the suburban zone and mining districts, 15 kilometres from railways and navigable water-courses. These holdings are let or sold in sections of 200 to 1,200 hectares at a sale price of 10 francs per hectare.

The third and last class consists of land intended for use as cattle ranches, situated at a distance of at least 15 kilometres from the boundaries above referred to. It is sold in sections of 1,200 to 5,000 hectares, at a price of 2 francs per hectare.

A wise provision enacts that agricultural land is not definitely sold or let until after a preliminary period of occupation, lasting for 5 years, during which the applicant or his agent must have begun making use of the land in accordance with prescribed conditions, which vary with the different classes of land.

Before entering into possession of his lot the applicant must sign a contract which lays down the conditions of preliminary occupation, as

also those of the subsequent sale or lease. The occupier pays an annual rent equivalent to 5 per cent. of the price of the land.

The purchase price is paid on the registration of the contract. The purchaser may however, discharge his debt in 10 annual instalments, paying interest on same at the rate of 4 % per annum.

If, after 5 years of preliminary occupation, the occupier has failed to utilise the land in the way prescribed, he forfeits the right to purchase or lease.

What has been said as to preliminary occupation of lands holds good only for Katanga, but the Government intends to introduce the same system into the other parts of the Colony.

Noteworthy proposals have recently been made by the Colonial Minister in a report on the agricultural situation of the Colony (1) with reference to the colonisation of Equatorial Congo, so different to Katanga in physical conditions and economic importance. These proposals are based on the following principles: 1, facilitation of the purchase and lease of agricultural lands, especially in the case of holdings of less than 300 hectares; 2, exemption from taxation of all rural buildings for a period of ten years; 3, abolition of customs duties on all requisites for the plantations, and the tax due on agricultural labour; 4, abolition of export duties on agricultural products, and reduction of rates of carriage; 5, organisation and facilitation of agricultural and mortgage credit.

#### § 4. THE LABOUR QUESTION AND LABOUR CONTRACTS.

The question of labour is certainly one of the most complex and delicate which the Colony has to face. The scanty population, the limited number of white colonists, and, more especially, the uncivilised state of the native have compelled the Government not to limit its action to regulating the relations between employers and employed, but to regulate also the mode of recruiting labour. It is therefore a two-sided problem, dealing, on the one hand, with the enrolment of labour, on the other with the condition of employment. Let us examine separately the two sides of the question and the solution given to them.

(a) *The Enrolment of Labor.* Before the annexation of the Congo to Belgium the lands of the Colony were exploited mainly by the State for its own benefit, and work was mainly limited to gathering the natural products of the soil, the natives being compelled to give their labour as a tax due to the State. When a plantation had to be laid out or a road or a railway built, this legal obligation laid on the natives supplied the requisite labour. Whites were only employed as directors or overseers: they were

(1) See the volume "L'agriculture du Congo belge", quoted amongst the sources of the present article.

engaged by the Administration or enlisted for a certain time in Europe. Even when the State left to private parties the exploitation of Crown lands, the main exports still consisted of the natural products of the soil. Europeans generally restrict their transactions to purchasing from the natives the products they gather, they are therefore traders rather than producers. On the other hand, the amount of labour required for plantations, buildings and mines is comparatively small. All this explains why, in most of the Congo, there is not yet a regular and considerable demand for labour.

Conditions are different however in Katanga. In this region there is, on the one hand, a great demand for labour, due more especially to the growing importance of the mining industries, and on the other hand the Belgian-Congolese population, which elsewhere has no competition to meet, here comes in contact with Anglo-Rhodesian competition. Moreover, the temperate climate of Katanga is suited to Europeans who can settle there, which is not possible in the other districts, and this naturally affects the organisation of labour.

In view of all this the most urgent question to be solved after annexation was that of encouraging the immigration of Belgians into Katanga.

The means employed for this purpose are the payment to Belgians of good character and fit for labour of an indemnity to cover, in all or in part, the cost of the journey, including not only the travelling expenses of the emigrant himself, but also those of his wife, children, baggage, furniture, etc. Full expenses are only allowed to third class passengers.

The Government also encourages undertakings, more especially if started by companies, for settling groups of colonists in this district. Such an effort was made by the *Compagnie foncière agricole et pastorale du Congo*. This company recruited colonists on the following conditions: each colonist received travelling expenses and a year's maintenance, during which time he was in the direct employment of the company. At the end of the year the Company granted the colonist lands which he could, at choice, purchase, rent, or take on the crop-sharing (*métayer*) plan, lending him the requisite plant and live-stock. The loan was secured on the land. The Company had received a free grant of 150,000 hectares of land from the Special Committee which administers Katanga, but the means at its disposal were inadequate for carrying out so ambitious a scheme, and in 1912 it returned the land and the settlements to the Government.

In the case of coloured labour the Government only regulates the mode of recruiting the natives. This is provided for by a decree of August 17th, 1910, amended by that of January 25th, 1912, of which the following are the main features; 1, The recruiting of labour is, in a general way, sanctioned throughout the Colony. Nevertheless, for reasons of public interest, which must be stated, the Governor General may forbid it in specified districts and for certain periods, or may make it subject to special conditions. 2, The definition given of recruiting by the decree of January 25th, 1912, is that of a person, native or other, conducting or attempting to conduct, engaging or attempting to engage natives to be employed at a distance exceeding 10 kilometres from their

customary residence. The provisions of the decree are, therefore, not applicable to persons employing labourers residing in the immediate locality. The aim of the decree is to protect labourers engaged far from their homes from the arbitrary tyranny of contractors. 3. No one may enroll labourers without a special permit. This is granted free of charge to persons engaging labourers on their own behalf, or for a single private individual or company of which, for at least three months, they have been the sole agents. In all other cases such permit is granted on payment of a fee of 100 francs. It, therefore, only affects, generally speaking, those persons who make a profession of recruiting labourers. The permit, which is valid for a year, may be suspended on serious grounds. 4. All persons engaging labourers are required to make suitable provision for their maintenance. If employment should not be found for such men, and if they should ask to be repatriated within a month of their arrival at their destination, the recruiting agent must comply with their request. This obligation does not hold good from the time that the labourer enters the service of an employer, nor if he should wilfully refuse the situation offered him.

(b) *The labour contract.* The decree of August 17th., 1910, on the recruiting of labour also regulates labour contracts, by which "a native of the Congo or adjacent colonies, whether he be registered or not, agrees to enter the service of an employer who is not a native of the Congo". The nature of the services to be rendered is not specified; consequently the decree applies indiscriminately to workmen, peasants, employees, servants, etc. The above definition also shows that the labour-contract stipulated between Europeans and natives is placed on the same footing as an ordinary contract regulated by the civil code or by local custom.

On the strength of this decree any native can legally hire his service to an employer. But natives placed under the protection of the State or of recognized associations, cannot until they have attained their majority or on their emancipation, legally hire themselves out without the consent of their guardians. This special provision was made in the interest of young natives who might engage themselves as labourers in order to escape from the educational discipline to which they are subjected. Women are also forbidden to hire themselves out without the express or tacit consent of their husbands, or, if unmarried, without that of the judicial or administrative authorities. The terms of the labour contract are drawn up by the parties to the same, subject to the following restrictions.

1. — No contract is valid for more than three years. When its duration is not stated in the agreement, or is not made clear by the nature of the work undertaken, it is determined by custom, and may not exceed three months.

2. — The wages must be agreed upon and paid in cash.

3. — All workers, including probationers, must be supplied with a book stating, amongst other things, the mode of payment of salary.

Unless agreed to the contrary, the employer is required to supply the labourer with board and lodging, and to pay him his wages each month, or each week if board and lodging is not given.

Lastly, regardless of any stipulation to the contrary, the employer is bound: (a) to see that the work is performed under suitable conditions of safety and hygiene; (b) to allow the labourer four days' leave a month without making any deduction for cost of food and lodging; (c) to provide, within the limits of possibility, proper treatment, for sick or injured labourers for a length of time at least equal to that granted for sick-leave which, except for agreements or customs to the contrary, varies, according to circumstances, from a fortnight to a month; (d) finally, he must provide, on the conclusion of the contract, for the return of the labourer to the locality in which the contract was drawn up.

The observance of these provisions is enforced by suitable penalties.

#### § 5. SOME DATA ON THE ECONOMIC DEVELOPMENT OF BELGIAN CONGO.

It is of interest to follow up the above particulars on the land system, labour, and labour contracts in the Belgian Congo by some data on its economic development, which we take from the Statistical Year Book of Belgium for 1913, recently published. We will first glance at the finances of the Colony:

*The Budget of the Colony.* — The ordinary receipts and expenditure of the Colony for the fiscal year 1913 amounted respectively to 40,418,100 frs. and to 50,933,064 francs. The principal receipts were derived from direct and personal taxation (fr. 10,142,000), custom's duties (fr. 8,261,500), transport dues (fr. 3,785,000), and the mineral output (fr. 3,780,000). Taxation on rubber and rubber plantations yielded 2,250,000 francs; that on ivory 2,110,000 francs. The most important items of expenditure are those for the general internal administration of the Colony (fr. 25,295,647) and for the administration of finances and mines (fr. 6,488,795). The outlay on agriculture amounted, for that year, to 1,003,300 francs; that on industry, commerce, and immigration in all to 988,671 francs.

*Production.* — Apart from plants cultivated by the natives for their own use, the more important of which are tapioca, sweet-potatoes, sorghum, bananas and ground nuts, the leading products of the Congo are rubber, ivory, palm-nuts, palm oil, and copal. The Government encourages the cultivation of rubber, cocoa, cotton and coffee.

The output of gold and copper is also constantly increasing. The Kilo mines yielded, in 1912, 740 kgs. of gold and those of Moto 245 kgs.

*Commerce.* — The foreign trade of the Belgian Congo for the period 1896-1912 is shown by the following table:

TABLE I. — *The Import and Export Trade of the Belgian Congo.*

Years	Special Trade		General Trade	
	Imports	Exports	Imports	Exports
	Fcs.	Fcs.	Fcs.	Fcs.
1896-1900 (yearly average)	21,508,728	35,202,947	24,711,700	29,771,839
1901-1905 id.	21,099,780	52,015,706	35,188,780	61,512,080
1906-1910 id.	26,443,836	56,662,785	33,574,203	76,960,388
1910 . . . . .	36,846,508	66,602,295	43,979,142	95,598,698
1911 . . . . .	48,632,877	54,052,426	58,385,060	78,955,390
1912 . . . . .	54,232,878	59,926,399	62,228,986	84,265,391

The most important trade of the Congo is that done with the home country; in 1912 the imports from Belgium amounted to 35,866,354 francs, and the exports to Belgium to 54,183,192 francs.

The special trade for 1911 and 1912, according to information given by the Colonial Office, was as follows:

TABLE II. — *General Results of the Foreign Trade of the Belgian Congo.*

Description	Imports		Imports	
	1911	1912	1911	1912
	Fcs.	Fcs.	Fcs.	Fcs.
1. Live Animals . . . . .	459,597.72	779,490.52		
2. Drinks and food stuffs . . .	11,911,990.35	11,145,888.93	919,521.93	1,132,890.76
3. Raw or semi-prepared material . . . . .	2,315,232.15	3,241,681.48	18,278,100.99	54,218,131.55
4. Manufactured goods . . . . .	34,896,950.97	39,005,817.35	1,735,447.50	1,252,852.08
5. Gold and silver ore . . . . .			3,119,050.01	3,322,221.38
Totals . . . . .	48,632,888.19	54,232,878.28	54,926,399.49	59,926,399.32

The principal exports in 1912 were rubber (fr. 34,796,103), copal (fr. 6,384,862), ivory (fr. 6,075,550), copper ore (fr. 4,112,400), gold ore (fr. 3,322,221), palm-nuts (fr. 2,770,880), palm oil (fr. 1,252,853), and cocoa (fr. 1,115,001).

*Shipping.* — During 1912, 268 ships (817,661 tons) entered the ports of Boma and Banana, and 269 (820,161 tons) cleared these ports.

## BULGARIA.

### DISTRIBUTION OF LAND ACCORDING TO CROPS AND TENURE.

#### OFFICIAL SOURCES :

- СТАТИСТИЧЕСКИ ГОДИШНИКЪ НА БЪЛГАРСКОТО ЦАРСТВО. (*Statistical Yearbook of the Kingdom of Bulgaria*). Sophia, State Printing Press.
- СТАТИСТИКА НА ЗЕМЛЕДЕЛКАТА И СОБСТВЕНОСТЪТЪ ВЪРЪХЪ 1908 ГОДИНА, КНИГА I, ПРИТЕЖАНИЯ ПО ОКОЛИНИ И ОКРАЗИ. (*Statistics of Landed Property in the Year 1908. Vol. I. Landed Property per Arrondissement and Department*). Published by the Bureau of Statistics of the Kingdom of Bulgaria. Sophia, 1914, State Printing Press.
- НАРЕДБИ ЗА ПРИБРОЯВАНЕ НА НАСЕЛЕНИЕТО, СТРАДИТЕ И ДОМАШНИА ДОБИТЬЪ ВЪ КИРОВОЦВО БЪЛГАРИЯ НА 31 ДЕКЕМВРИЙ 1905 ГОДИНА. (*Information in view of a new Census of the Population, Habitations and Domestic Animals in the Principality of Bulgaria*). Issued by the Bureau of Statistics; Sophia, 1905, State Printing-Press.
- LA BULGARIE CONTEMPORAINE. (*Contemporary Bulgaria*). Official Report of the Department of Commerce and Agriculture, in view of the International Exhibition of Liège in 1905, Brussels, 1905. Foutez.
- BULGARIA OF TO-DAY. Official Edition of the Bulgarian Ministry of Commerce and Agriculture, issued in view of the Balkan "States Exhibition" to be held in London in 1907. London, 1907, Hazel.

#### OTHER SOURCES :

- WEISS-BARTENSTEIN (Dr. W. K.): Bulgariens Volkswirtschaftliche Entwicklung bis zum Balkankriege. (*The Economic and Social Development of Bulgaria up to the Balkan War*). Berlin, 1913, Dietrich Reimer.
- BULGARIEN. WIRTSCHAFTLICHE VERHÄLTNISSE 1912, nach den Berichten des k. u. k. Österr. Ungar. Konsularämter. (*Economic Conditions of Bulgaria in 1912, according to the Reports of the Austrian Consuls*). Vienna, 1913, Edition of the Museum of Commerce.
- WIRTH (Dr. Albrecht): Der Balkan. Seine Länder und Völker in Geschichte, Kultur, Politik, Volkswirtschaft und Weltverkehr (*The Balkan Peninsula, its Peoples, History, Culture, its Economic and Social Policy and its Means of Communication*). Stuttgart, 1914, "Balkan Review" published at Berlin. Various Articles.
- DE LA LLAVE Y GARCIA (Joaquin): Recuerdos de Bulgaria y Rumania desde el punto de vista económico (*Souvenirs of Bulgária and Roumania from an Economic Point of View*). Barcelona, 1912, Altes y Alabart.



## § I. GENERAL FEATURES.

*Situation, Arable Soil, and Climate.*

The Kingdom of Bulgaria is considered, in the present article, as it was before the Peace of Bucharest (1). It occupied that part of the Balkan peninsula lying between  $41^{\circ} 36' 12''$  and  $44^{\circ} 12' 30''$  North latitude and between  $22^{\circ} 12' 45''$  and  $28^{\circ} 36' 45''$  longitude East of the meridian of Greenwich, and its total area was 96,345.5 square kilometres. (2).

The country presents a fortunate combination of high mountain chains surrounding and protecting vast fertile plains. At the foot of peaks, many of which exceed 2,000 metres in height, (Moussalla for instance, the highest in the kingdom, attains 2,923 metres), plains, of which the lowest point above sea level is 200 metres, extend as far as the eye can reach. For the whole of Bulgaria the average altitude is 425 metres, and the total area of the territories of the various levels is thus divided :

From	0 to	200 m. altitude	35,545.9 sq. km. that is	37.3 % of the whole country
"	200 "	500 "	31,439.8 "	33.0 "
"	500 "	1,000 "	16,068.8 "	16.9 "
"	1,000 "	2,000 "	9,111.9 "	9.6 "
"	2,000 m. and over		486.8 "	0.5 "
Total . . .			95,223.3 (3)	100.0

In view of the local conditions, climatic and others, this shows that about 7 % of the total area of the kingdom is land adapted for the most intensive cultivation.

(1) Bulgarian statistics, even the most recent, as for instance those issued a few weeks ago in regard to landed property (see "Sources"), contain no particulars respecting the territories that became Bulgarian by the peace of Bucharest. Under these circumstances, we must confine ourselves to particulars collected before the war.

(2) According to the calculations made at the Staff Office of the Bulgarian army. The figures given for the area vary considerably (from 95,223.2 km., according to Jourdan Dantschoff and Ischirkoff, to 99,276.0 km., according to T. Karakascheff) and are so uncertain that the Official Statistical Yearbook gives two different estimates; that given above appears through the greater part of the book, the other, which is less (95,223.3 km.), in the first chapter which treats of territory and population (See "Yearbook" 1910, p. 4). Owing to this anomaly we must take sometimes the one estimate, sometimes the other.

(3) See note 2.

The great mountain chains of Rilo-Rhodope, Ossogovo, Stara Planina and others divide Bulgaria into three regions, differing essentially from one another in many respects, viz. :

North Bulgaria	with	50,687	square kilometres.
South Bulgaria	"	32,977	" "
South-West Bulgaria	"	11,558	" "

North Bulgaria may be described as consisting of a series of terraces rising gradually from north to south from the Danube to the high table-land. South and South-West Bulgaria, extending, the one towards the Maritza, the other towards the Black Sea and enjoying a most favourable climate, are the principal centres of intensive agriculture, viticulture and gardens.

The conditions in respect to water supply are in general excellent. The numerous tributaries of the Danube in the north and of the Maritza in the south assure an irrigation fully sufficient for the cultivable regions.

With regard to climate, Bulgaria is scarcely more favoured than the rest of the Balkan Peninsula, especially in the north. The warm and beneficent west winds, checked and cooled by the high mountains, reach it dry and cold, and cannot counterbalance the influence of the north-east winds, which are the most prevalent, and which sweep unchecked with their cold breath over all the valley of the Danube. The average temperature of the months varies from about  $-2^{\circ}$  in January to  $+23$  in July (general average for the year  $+12^{\circ}$ ), indicating a climate quite continental. The rainy season in Bulgaria corresponds with that of the whole of Eastern Europe, but also during the other seasons it rains abundantly. The average annual rainfall is 700 litres per square metre, and the rainfall is nowhere less than 450 litres.

*Administrative Divisions: Departments, Arrondissements and Communes.*

For administrative purposes the kingdom is divided into twelve departments, of which the capitals are Bourgas, Varna, Vidin, Vratza, Kustendil, Plovdiv (Philippopoli), Pleven (Plevna), Rousse (Rustchuk), Sophia, Stara-Zagora, Timovo and Choumen. At the head of each department is a prefect entrusted with all executive power, and especially the duty of supervising the administration of the communes, and of managing the finances of the department. An elective body, the Departmental Council, works in connection with each prefecture, its functions being to divide the taxes among the communes, to administer the property of the department, to draft the estimates of revenue and expenditure, and to audit the accounts of the local institutions under its control. The departments are subdivided into 71 arrondissements, and these again into communes, which under Art. 3 of the Constitution have a very extensive autonomy.

The commune, which serves as a basis to the edifice of the State, enjoys an almost total autonomy, with which that of no corresponding

foreign organisation can be compared. Urban and rural, they all enjoy judicial independence and are administered by municipal councils elected by universal suffrage for three years in the urban and for two in the rural communes. The municipal councils of the cities are convoked in ordinary session four times a year, those of the rural three times a year. In both cases the session lasts not less than a fortnight. The municipal council elects from among its members a mayor and one or more colleagues who constitute the executive body. The entire administrative authority is vested in the mayor, and his ordinances or rules are obligatory, just as those of the central authorities are.

#### *Population.*

At the beginning of the year 1911 the whole population of the Kingdom of Bulgaria amounted to 4,329,198, and this population was incontrovertibly one of the most heterogeneous in Europe, divided as it was, according to official statistics, into not less than thirty-one ethnographic groups, speaking twenty-three different languages. Besides the Bulgarians properly so called, the number of whom is calculated in official statistics at 3,984,000, the chief groups may be divided as follows:

Turks . . . . .	500,000	Jews . . . . .	40,000
Gipsies . . . . .	100,000	Tartars . . . . .	20,000
Roumanians . . . . .	80,000	Armenians . . . . .	15,000
Greeks . . . . .	65,000		

In an economic point of view one of the peculiar features of this motley population is the large number of large families. The statistics of the year 1905 referring to this subject give the interesting figures which we reproduce below :

TABLE I. — *Statistics of Large Families.*

Number of Members of Families	Number of Families			Number of Members of Families	Number of Families		
	Towns	Country Districts	Total		Towns	Country Districts	Total
1 . . . . .	14,470	10,390	25,110	11 . . . . .	731	10,032	10,763
2 . . . . .	19,862	24,267	44,129	12 . . . . .	394	6,503	6,897
3 . . . . .	26,339	47,009	73,348	13 . . . . .	174	4,158	4,332
4 . . . . .	28,603	69,393	97,996	14 . . . . .	103	3,029	3,132
5 . . . . .	26,549	84,373	110,922	15 . . . . .	51	1,791	1,842
6 . . . . .	20,472	82,668	103,140	16 . . . . .	33	1,208	1,241
7 . . . . .	13,183	65,424	78,607	17 . . . . .	16	863	879
8 . . . . .	7,266	44,269	51,535	18 . . . . .	17	559	576
9 . . . . .	3,450	26,972	30,422	19 . . . . .	4	419	423
10 . . . . .	1,600	16,099	17,699	20 . . . . .	6	284	290

These numerous large families constitute a patriarchal form of group in which generations of adult descendants remain under the direction of the head of the family and under the system of community of property. Until lately much more numerous, these large families are now tending to disappear, owing to the subdivision of rural holdings which the succession of property and its division among the descendants of the heads of the present families involve.

*Agricultural Statistics. Organisation and Working.  
Census of Landed Property.*

We shall now conclude these short introductory notices by stating that the Kingdom of Bulgaria is incontrovertibly, one of the most advanced as regards organisation and development of statistics. Since the proclamation of independence, the different Ministries which have succeeded to power have always given special attention to this important branch of the central administration. Thanks to its perfect organisation, and thanks also to the wisdom of its functionaries, powerfully seconded by special legislation which unhappily is yet almost unique of its kind (1), the statistics Commission of the Kingdom of Bulgaria possesses exact details of every branch of national life, which have seen the light in a remarkable series of publications.

Extremely detailed census returns of the population of the Kingdom were made out in 1881, 1885, 1888, 1893, 1900, 1905 and 1910. Such censuses will be again taken in the future at regular intervals of five

(1) We here quote, by way of example, some articles of the law regarding statistics :

Art. 14. Information, whether verbal or in writing, furnished to the Statistics Commission, must never in any case serve as an excuse for additional taxation, nor may it be adduced as evidence before the different administrative and judicial authorities. The reports in writing sent in by the employees of the State or of the communes, by various societies and by private persons must be destroyed by the Commission after the elaboration and scrutiny of the general tables of statistics.

Art. 16. Any private person or any society refusing or trying to avoid furnishing data or information asked for, or giving false, inexact or incomplete data or information, is liable to a fine not exceeding 100 francs, by order of the prefect based on the administrative enquiry relative thereto.

Art. 17. Any mayor of a commune, any member of a permanent commission or other communal or departmental functionary or employee (deputy or substitute of the mayor, instructor, trustee of church or school, secretary, etc.) who refuses or who has neglected at the proper time to furnish the required data, or who may have furnished false, inexact or incomplete data, is liable to a fine not exceeding 100 francs, by decree of the prefect and based on the administrative enquiry relative thereto.

Art. 19. Independently of the fines provided for in articles 16, 17 and 18 of the present law, the prefect or other authorised authority must immediately take the necessary steps that the information asked for by the competent authorities be furnished on the spot for the account of anyone who has caused any delay in communicating the information or given it exactly or insufficiently.

years and, as was the case on the last two occasions, information in regard to the dwellings, livestock, agricultural machinery and means of transport will also be obtained.

Since the proclamation of independence two such censuses have been taken, the first in 1897, the second in 1908. The procedure followed was the same in each case. Very detailed schedules of questions were forwarded to each individual landholder, and sent to the mayors of the several communes to be filled in, after they had received instructions on the subject. There are no other census agents. The information to be filled in on the census papers was obtained from the registers for the purpose of the land tax, which have to be kept in every commune.

The registration of these reports is made in the offices of the mayors, and, on their responsibility, for private landed property. For communal land and also for that belonging to the Church, to schools, to public and private establishments and to the State, the registration must be made by those entrusted with the administration of the land.

The ultimate verification of the data of the second census of landed property was completed in March, 1909, the elaboration and grouping in tables was finished in April, 1911. The collected material was published in four large volumes at the close of the summer of 1911. The general results (from which we borrow the greater part of the figures that follow) were published in one volume in the course of the year 1914. (See "Sources").

## § 2. THE AGRICULTURAL POPULATION.

The distribution of the mountain ranges and other subjects dealt with in the first paragraphs of the present article, show that Bulgaria is a country destined by nature for the most intense development of all branches of rural economy. And, in fact, statistics indicate that more than three quarters of the population of the Kingdom are engaged in agriculture. The exact figures, according to the annual official report of 1910, are shown in the following table:

Professions	Number of Inhabitants	Proportion % of the Total Population
Agriculture (1) . . . . .	3,108,836	77.64
Quarries, Mines, Salt Works . . . . .	2,664	0.05
Industries and Trades . . . . .	358,846	8.99
Transport and Communications . . . . .	64,408	1.60
Commerce and Banks . . . . .	165,806	4.22
Liberal Professions, Administration, Private Means, Domestic Service, Unproductive and Unknown. . . . .	335,635	8.19
Total . . . . .	4,035,575	100.00

This clearly marked preponderance of the agricultural classes prevails over the whole extent of the country. Under the influence of purely local conditions the proportions in certain districts sink far below the general averages, as in the arrondissements of Sliven and Pechitchera, where the existence of great industries (occupying 27 % and 30 % of the total population) lowers the agricultural percentage to 50.13 and to 52.61 %. In the other districts, on the contrary, it rises sometimes to much above the average, for instance to 92.56 % in the rural arrondissement of Roussé, to 93.48 in that of Sophia and even to 95.60 in the district of Kula (department of Varna). But, we repeat, these are exceptions due to purely local circumstances, and the following table proves that they have no influence whatever on the eminently agricultural character of all the different regions of the kingdom.

(1) Including those who live on the produce of hunting and fishing.

TABLE II. -- *Agricultural Population of Bulgaria according to Department.*

Department	Area in sq. Kms.	Total Population	Agricultural Population			% of the Total Population
			Active	Not Active (1)	Total	
Bourgas . . . . .	11,836.2	335,958	135,680	105,329	241,009	71.13
Varna . . . . .	9,031.0	305,134	124,610	100,786	225,396	73.87
Vidin . . . . .	4,405.0	216,077	102,979	78,447	181,426	83.96
Vratsa . . . . .	6,915.6	285,461	138,987	110,350	249,337	87.35
Kustendil . . . . .	4,727.6	213,661	101,952	74,550	176,502	82.61
Plovdiv . . . . .	10,124.7	418,547	161,866	121,205	283,071	67.63
Pleven . . . . .	7,661.1	338,979	153,802	125,572	279,374	81.83
Rousse . . . . .	7,591.5	378,932	162,002	136,266	298,268	78.71
Sophia . . . . .	9,674.6	433,361	168,441	131,402	299,843	69.19
Stara-Zagora . . . . .	10,613.5	420,372	190,576	139,449	330,025	78.31
Trnovo . . . . .	7,745.3	422,769	179,518	149,101	328,619	77.73
Choumen . . . . .	5,999.4	266,324	118,768	99,178	217,946	81.84
Total . . . . .	96,345.5	4,035,575	1,739,181	1,369,635	3,108,816	77.04

(1) That is to say members of the family of the cultivator or other persons depending upon him, but taking no direct part in agricultural labour.

### § 3. DIVISION OF LAND ACCORDING TO CROPS.

#### *Character of Farms. Progress from 1897 to 1908.*

Let us now see how much land is at the disposal of this numerous agricultural class, and how it is cultivated.

According to the census of landed property in the year 1908, the results of which have lately been published, the total area of the whole kingdom was 9,634,550 hectares (1). That land which from natural causes was incapable of cultivation (rocks, hills, regions of too great elevation, tract covered with water, etc.) with that not cultivated for other reasons (inhabited districts, roads, highways, railways, etc.), covered an area of 1,652,099.02 hectares, equal to 17.15 % of the total area of the country.

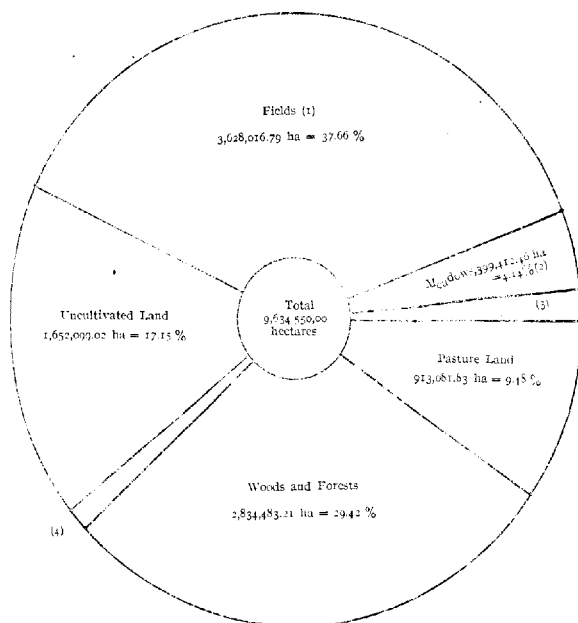
Scarcely twelve years earlier when the first census of landed property was made in 1897, the area of uncultivated land amounted to 2,156,701.05 hectares, equal to 21.54 % of the whole area of the kingdom.

(1) See note 2, page 84.

In other words, in that short space of time the people of Bulgaria have wrested from nature 504,602 hectares, and increased their landed property capable of cultivation to 5.24 % of the whole country, or 6.5% of the cultivable part.

After deducting the amount of uncultivated land of which we have just spoken, the total area of uncultivated land in Bulgaria is found to be 1,982,450.98 hectares, the division of which according to cultivation is shown more clearly as follows.

*Distribution of Land in the Kingdom of Bulgaria in 1908,  
according to Crops.*



(1) Fields, Kitchen gardens, Fallow Land, Land not utilised, Land sown for gardens or with tobacco, sugar beet, etc.

(2) Natural Grass and Artificial Meadows.

(3) Fruit Gardens, Land planted with mulberries, roses and ordinary or America vines. — 112,080.90 ha. — 1.16 %.

(4) Marshes, islands, swamps, building lots, waste land, land covered with brushwood, or willows, mines etc. — 95,365.71 ha. — 0.99 %.



We give this division with fuller details, adding the relative figure for each class of land, expressed in percentage of the general area cultivated land, and giving the corresponding figures of the land census of the year 1897. We shall thus be able to judge of the progress made relatively to the extent of every kind of cultivation during the decade here under consideration.

TABLE III. — *Distribution of Land according to Crops.*

Class of Land	Area Cultivated		Percentage of Increase or Decrease	Relative Area in 1908 per cent
	1897	1908		
Fields . . . . .	2,975,386	3,628,016	+ 21.93	45.45
Meadows. . . . .	352,404	399,412	+ 13.34	5.00
Gardens . . . . .	5,020	9,230	+ 83.87	0.11
Rose Gardens. . . . .	4,844	7,862	+ 62.31	0.10
Vineyards . . . . .	114,815	94,987	- 17.27	1.20
Pasture Land . . . . .	970,199	913,081	- 5.89	11.44
Woods and Forests. . . . .	2,867,870	2,834,493	- 1.16	35.10
Miscellaneous . . . . .	123,207	95,395	- 22.60	1.20
Total . . . . .	7,413,748	7,982,450		100.00

This little table shows admirably the present position of rural economy in Bulgaria. In the first place we observe a very considerable diminution (22.69 %) of the general area of land the utility of which is not the result of cultivation properly so called, viz. the area of marshes, sandy islands in rivers, salt pits, nurseries and other land more or less left idle. We observe a marked diminution in the area of pasturage, which is more and more giving place to meadows, natural or artificial.

With these diminutions, which have undeniable advantages, we observe it is true, a slight decrease in the area of woods and forests, and one much more serious in that of the vineyards, but in both cases the lesser quantitative value shown by the figures in the table is largely compensated in reality by the greater qualitative value of the produce. With regard to the forests, the laws enacted during the last few years not only tend to check the cutting down of trees, but to encourage the rational management of what still remains of the once vast forest wealth of the country. As vineyards disappear here and there, it is always to give place to more intensive cultivation, more productive in an economic point of view, such as that of roses and the more delicate fruits.

Departments	Fields (1)			Meadows			Pear or Mulberry-trees			Gardens			Vineyards			Pasture Land			Woods and Forests			Other Land (2)			Total		
	Hectares	per 100 inhab.	Hectares	per 100 inhab.	Hectares	per 100 inhab.	Hectares	per 100 inhab.	Ares	Ares	per 100 inhab.	Ares	Hectares	per 100 inhab.	Ares	Hectares	per 100 inhab.	Ares	Hectares	per 100 inhab.	Hectares	per 100 inhab.	Ares	Hectares	per 100 inhab.	Hectares	per 100 inhab.
Bourges . . .	4,579,619	14.28	1,358,187	3.05	107,86	5	30	00	11,677.14	310	160,802.29	46.69	42,043.50	122.28	28,679.62	83.1	2,055,461.77	310.00									
Yonne . . .	4,968,611	154.66	5,875,91	1.85	161,51	5	—	—	7,438.89	234	28,099.74	9.11	27,671,676	86.36	18,165.98	37.2	826,115.61	263.30									
Vitry . . .	206,350.24	31.08	4,233,007	18.62	223,42	10	—	—	3,234.73	143	18,893.10	8.33	73,591.63	32.49	2,431.00	107	347,086.09	153.10									
Yveline . . .	2,281,617.2	26.31	68,566.75	2.02	148.33	5	72	00	1,718.37	57	26,114.12	25.40	111,886.74	37.42	5,700.26	191	492,332.31	164.65									
Rouen . . .	14,277,81	94.14	37,344.88	14.07	2,072.85	133	—	—	6,334.37	285	4,5034.93	19.29	123,475.35	55.47	646.38	29	559,455.77	157.44									
Phuoc . . .	2,93,396.13	67.82	28,308.15	6.55	466.21	11	44,244	90	21,742.47	592	1154,198.2	26.66	307,666.34	91.92	868.75	19	862,333.33	199.23									
Reims . . .	3,338,007	90.12	6,238.84	1.59	145.89	4	—	—	3,698.28	113	84,646.76	24.98	161,031.28	45.69	8,667.74	43	579,338.57	164.39									
Sophia . . .	2,884,000	53.21	98,104.69	29.79	359.38	8	—	—	8,631.16	220	53,614.42	13.86	243,021.28	61.90	6,439.67	164	671,069.93	171.15									
St. Zegera . . .	4,698,529	104.41	1,511,115	3.50	771.00	18	371,380	80	17,606.88	418	92,066.04	21.33	334,230.34	79.28	1,004.84	44	944,557.86	214.11									
Tierrades . . .	3,937,399	97.45	294,392.4	6.76	43,88.27	13	352	00	6,656.95	132	83,112.98	13.90	169,307.63	38.90	19,333.52	455	694,473.11	138.81									
Chamon . . .	233,115.69	8.03	10,289.11	3.03	65.28	2	—	—	5,418.81	200	47,861.36	17.44	231,896.63	85.58	4,58.1	16	532,855.61	194.15									
Total . . .	36,806,070	86.66	309,142.16	7.53	92,306.6	22	786,228	19	114,087.31	227	913,081.83	21.81	2,834,403.21	67.70	93,365.71	228	7,954,505.98	196.67									

(1) Including vegetable gardens.

(2) Including meadows, islands, swamps, salt-pans, nursery gardens, etc.

The most characteristic figures of the table are those which indicate the progress made during the short period between the first census and the second, in the cultivation of fields, meadows, orchards, and rose gardens in other words, of intensive cultivation and great economic productivity. And if we take into account the fact that the quantitative and qualitative development advance equally, that the years in question have been especially fruitful with regard to the progress in the technique of cultivation and the improvement of produce, and that the output is every day becoming easier and more profitable we shall agree that the above table is in itself sufficient to present the future of agriculture in Bulgaria in the most favourable light.

We shall complete this short description of the division of land in Bulgaria capable of cultivation and of the general conclusions authorised by the progress made, with Table IV, which shows in more detail the area of land according to cultivation and according to departments of the kingdom with the average extent in ares of cultivation per 100 inhabitants:

#### § 4. GENERAL DISTRIBUTION OF LANDED PROPERTY.

##### *Various Classes of Landed Property. Progress from 1867 to 1908.*

Let us now consider the division of land in Bulgaria, not according to crops, but according to tenure.

For this purpose it will be convenient to divide the landed property into four general classes, viz.:

1. *Private* landed property, that is to say, belonging to private individuals.

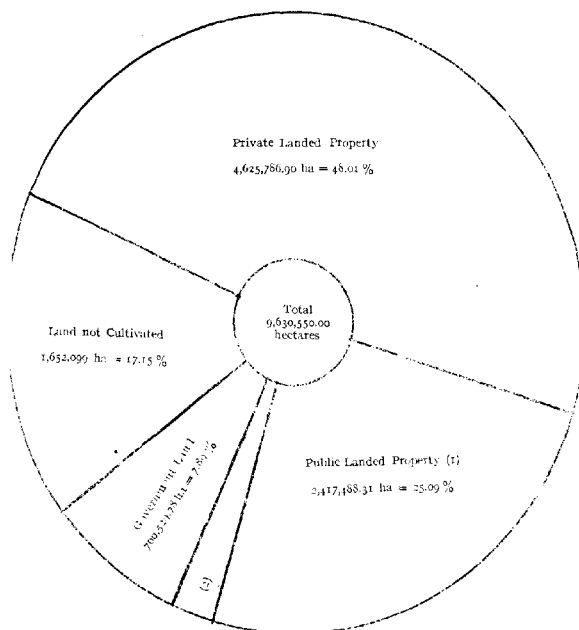
2. *Public* landed property, under which denomination we shall consider exclusively land belonging to *communes*, that is, land cultivated for the common benefit of all the inhabitants of the commune.

3. Landed property of *institutions*, that is, land belonging to schools, churches, monasteries and convents, mosques (including vakouf property), the National Bank of Bulgaria, the Agricultural Bank of the Kingdom, various societies and departments (provinces) of the kingdom and finally.

4. Landed property of the State.

The general distribution of these various classes of landed property throughout the kingdom with regard to its total area is shown very clearly below.

*Distribution of the Land in the Kingdom of Bulgaria in 1908,  
according to Tenure.*



That is to say, belonging to communes.

Land belonging to institutions, societies etc. — 178,645.99 ha. = 1.86 %.

It will be seen, we include uncultivated land. If we neglect it, that is, if we take account only of land of real value for agricultural economics, the general division of landed property in the whole Kingdom will be as follows:

Private Landed Property . . . . .	57.09 %	of the total cultivated.
Public " " " " " " " " " " " "	30.20	
Landed Property of Institutions . . . . .	9.53	
" " " " " " " " " " " "	2.28	

100.00

Let us now compare the division of the land as possessed in 1908 with the corresponding data of the first land census of 1897, as we have already compared the figures respecting the distribution according to crops.

TABLE V. — *Distribution of Land According to Tenure.*

Holdings	Area in hectares		Increase or Decrease	
	1897	1908	Hectares	%
of the State . . . . .	1,015,903.23	760,529.78	— 255,373.45 —	25.14
» » Departments . . . . .	441.42	1,275.40	+ 833.98 +	188.63
» Communes . . . . .	2,291,156.30	2,417,488.31	+ 126,331.81 +	5.51
» Schools . . . . .	67,796.09	60,210.04	+ 1,413.95 +	2.09
» Churches . . . . .	13,121.88	14,413.65	+ 1,291.77 +	9.84
» Monasteries . . . . .	44,194.56	56,327.80	+ 12,133.24 +	27.45
» Mosques . . . . .	3,254.33	4,137.43	+ 883.10 +	27.13
» the National Bank . . . . .	23.00	2,433.34	+ 2,410.34 +	10,479.74
» » Agricultural Bank . . . . .	187.90	26,552.21	+ 26,364.31 +	14,031.03
» Various Societies . . . . .	112.32	4,296.12	+ 4,183.80 +	3,724.86
» Private Persons . . . . .	3,977,557.72	4,625,766.90	+ 648,229.18 +	16.30
Not Cultivated . . . . .	2,220,801.05	1,652,099.02	— 568,702.03 —	25.61
Total . . . . .	9,634,550.00	9,634,550.00		

That which first strikes us in this table is the general increase in the area of all the classes of cultivable lands with the single exception of those which belong to the State. Of this increase, the total of which is more than 824,000 hectares, not quite one third is covered by the decrease in the domains of the State. The rest, more than two thirds, 568,702 hectares, has been wrested from nature by the reclamation of land not worked at the time of the first land census.

In the different classes of holdings the increase has varied considerably. Let us observe especially the perceptible difference between the figures furnished by the two principal groups: that of private property and that of communal property. The increase in these two groups alone amounts to 774,590 hectares that is 94 % of the total increase for the whole country. But, while the communal property has increased only by 5.51 % on what it was in 1897, private property has gained 16.30 % on its former area. This fact alone is a certain index of a social evolution in conformity with modern principles of individual property.

Finally, let us note the enormous increase of the landed property of the National Bank of Bulgaria, of the Agricultural Bank of Bulgaria.

and of the various "Societies" (10.478 % in the first case, 14.031 % in the second and 3.725 % in the third). The readers of our Bulletin are already acquainted with the first two of these institutions (1); they know that the making of grants to private agriculture is the sole object of the Agricultural Bank, and one of the chief objects of the National Bank. We need only add that the greater number of the "Societies", comprised under the name of "Various Societies", all have identical or analogous aims, in order to show the importance of the figures pointed out as indicative of a truly extraordinary development of agricultural credit in Bulgaria, and of a constant and energetic evolution of the most modern methods of home colonisation.

The results of this are clearly shown by a comparison of the total number of landed proprietors in the country at the time of the first census with that at the time of the second census above mentioned. In 1897 it was 806,245, and nine years later (1907) it was above 942,897. In other words, during that short period, the number of landed properties had increased by 136,652, that is 16.95 %, on the number in 1895.

The distribution of this general increase according to the class of proprietor ought to be shown here.

It is as follows:

TABLE VI. — *Changes in Tenure of Land, from 1897 to 1908.*

Class of Holding	Number of Holdings		Increase or Decrease	
	1897	1908	Number	
Belonging to the State . . .	1,060	1,035	—	25
to Communes . . .	3,661	3,639	—	25
to Departments . . .	8	12	—	4
to Schools . . .	907	1,281	—	374
to Churches . . .	601	1,100	+	499
to Monasteries . . .	251	321	—	70
to Mosques including Vakouf Property . . .	130	392	+	262
to the National Bank . . .	1	149	—	148
to the Agricultural Bank . . .	21	1,427	—	1,406
to Societies . . .	14	174	—	160
to Private Persons	799,588	933,307	+	133,777
Total . . .	806,245	942,897	+	136,652

(1) See our Number for June, 1911 pp. 185-200.

As might be expected, the figures of this table correspond more or less with those of the preceding. In this, as in the former, the greater proportion of the increase ascertained during the period in question is in private property, and in that of institutions, the object of which is to encourage its development. Of 136,652 new holdings, formed since 1897, there are 135,493, that is 99.11 % of the whole, which belong either directly to private individuals or to institutions which especially seek to encourage private property, such as the Agricultural Bank and societies of rural credit. And this tendency towards the increase of private property is confirmed by the fact that the only two diminutions in our table concern other than private property, that of the State and that of the Communes.

§ 5. PRIVATE LANDED PROPERTY IN BULGARIA, AREA,  
DIVISION AND READJUSTMENT OF FARMS. CONCLUSION.

For the most important class of all, that of the purely individual holdings of private persons, we must now compare the figures indicating in percentage the increase in area and in number of such landed properties. In the first case, that is as regards area, the ascertained increase is 16.30 %; in the second it is 16.73 %. In other words, the increase in the number of the holdings is perceptibly superior to that of their average area.

And this brings us to the last of our questions, and the most important as regards the progress of internal colonisation in Bulgaria, viz. the division of the landed property of the Kingdom according to the size of the estates.

The data furnished by the census of landed property in 1897 and by that held in 1908 are the most complete and the most detailed; from them we extract the following figures:

TABLE V. I. — *Distribution and Evolution of Private Landed Property in Bulgaria from 1897 to 1908.*

Classes of Holdings according to Area		Number of Holdings		Total Area of Holdings in hectares		Percentage of Total Holdings			
		1897	1908	1897	1908	1897	1908	1897	1908
up to	5 decares	166,765	180,304	41,051.45	46,231.74	21	19	1.0	1.0
from	5 to 10 "	96,508	113,416	67,299.75	83,748.21	11	12	1.7	1.8
"	10 " 20 "	106,373	131,148	156,701.75	191,587.58	13	14	3.9	4.2
"	20 " 30 "	75,100	86,500	187,303.50	214,945.04	9	9	4.7	4.6
"	30 " 40 "	60,061	68,316	209,742.09	238,506.72	8	8	5.3	5.2
"	40 " 50 "	50,222	57,772	225,745.05	259,584.88	6	6	5.7	5.6
"	50 " 75 "	92,515	106,598	579,004.14	657,316.21	12	12	14.3	14.2
"	75 " 100 "	56,486	67,512	488,323.70	584,504.15	7	7	12.3	12.6
"	100 " 150 "	55,503	67,610	672,052.94	818,669.36	7	7	16.9	17.7
"	150 " 200 "	22,093	26,718	379,172.66	458,308.55	3	3	9.5	9.9
"	200 " 300 "	14,011	17,304	358,064.07	412,393.16	2	2	9.0	8.9
"	300 " 400 "	4,338	5,047	148,463.40	171,559.01	1	1	3.7	3.7
"	400 " 500 "	1,770	1,933	78,785.99	86,200.81	0.22	0.21	2.0	1.9
"	500 " 1,000 "	1,993	2,223	133,886.22	147,892.26	0.25	0.24	3.4	3.2
"	1,000 " 2,000 "	666	592	82,600.26	79,744.43	0.08	0.06	2.1	1.7
"	2,000 " 3,000 "	155	154	37,770.31	37,513.48	0.02	0.02	1.0	0.8
"	3,000 " 5,000 "	100	99	42,736.42	37,291.90	0.01	0.01	1.1	0.8
"	above 5,000 decares	87	91	96,644.42	99,761.88	0.01	0.01	2.4	2.2
		799,588	933,367	3,077,557.72	4,625,786.90	100	100	100	100



That which first strikes us in this table is the remarkably small number of large and very large private landed estates throughout the Kingdom. Even if we limit the term "large landed estate" to those exceeding 100 hectares in extent, the total number will be only 936, scarcely *one per thousand* of the total. And the whole extent of these 936 "large landed estates" that is 254,348 hectares, will only represent 5.5 % of the whole area of private landed property in the country. These figures compared with those given above as to the general division of the population according to occupation are alone sufficient to assure us that by far the larger proportion of private landed property in Bulgaria is in the hands of the rural agricultural classes.

And if we compare the figures resulting from the land census of 1897 with those of the census of 1908, we shall easily perceive that the evolution is taking place in a manner clearly favourable to a rational development of the agricultural economy of the country.

To facilitate the comparison, let us condense the rather diffuse details of the preceding table, dividing the holdings into five categories only, considering as "a parcel of land" every holding not exceeding two hectares in extent, as "small peasant holdings" those of from 2 to 5 hectares in area, as "medium holdings" those of from 5 to 20 hectares, as "large" those of from 20 to 100 hectares, and as "large private landed estates" those of an area which exceeds the last figure. Taking into consideration only the total area of the holdings in each of these categories, in proportion to that of all the landed property of private owners in the whole country, we obtain the following figures;

	1897	1908
Parcels of Land . . . . .	6.6 %	7.0 %
Small Peasant Holdings . . . . .	15.7 "	15.4 "
Medium Peasant Holdings . . . . .	53.0 "	54.4 "
Large Peasant Holdings . . . . .	18.1 "	17.7 "
Large Private Landed Estates . . . . .	6.6 "	5.5 "
Total . . . . .	100.0 %	100.0 %

Given the general conditions, orographic, climatic, economic, agricultural, etc., of the Kingdom, the category of landed properties which with regard to area lends itself best to a rational development of rural economy is that of peasant holdings of medium size, that is of from about 5 to 20 hectares. Now, from the preceding figures, it is clear that already at the date of the first census of landed property, more than half the land of the country came under this head. And the same figures show that during the nine years which have passed between the first and second census this proportion has only increased. This is an excellent index of the satisfactory progress in well-being of the agricultural class properly so called.

Of the four other categories, three show a strongly marked tendency to diminish, viz. that of "large private landed estates", of which we have

already spoken, and of those too small for the support of their proprietors or too large for the economic efforts which the Bulgarian peasant can make.

As to the category of "parcels of land" or indeed of all small holdings, we may observe that the marked increase, as shown by the figures, is due chiefly to the attention given to roses, one of the most profitable kinds of intensive cultivation. This is another indication of a happy and prosperous evolution of agricultural economy in Bulgaria.

Finally, as regards the general division of landed property, the Kingdom is in a favourable condition, such as to permit a progressive and continuous evolution of rural economy without the necessity of any specially energetic intervention of the State for the encouragement of home colonisation. The most serious fault in the agricultural regime of the country is perhaps the excessive subdivision of private land. In 1897, for instance, the average number of separate parcels belonging to each landholder was ten for the whole Kingdom. Holdings of from one to two hectares were subdivided into five parcels on an average, and for estates of great extent the average number of parcels was 38.

The land census of the year 1908 showed a further and very serious aggravation of these conditions. The average number of isolated parcels belonging to each landholder rose from 21 to 24 in the case of holdings of from 10 to 15 hectares, from 31 to 38 in that of holdings of from 100 to 200 hectares, and from 28 to 46 in that of those exceeding 500 hectares. For the whole Kingdom this average rose from 10 to 11.

This fact has not yet attracted the attention of the Bulgarian legislature, and no special regulations have been passed to encourage a general readjustment of landed property. But it is only fair to add that the law of 1904 regarding the cultivation of pasture land and meadows contains certain provisions manifestly intended to encourage and facilitate agreements between private persons for the purpose. In fact, the law grants special advantages to the purchasers of parcels who succeed in making arrangements with neighbours for rounding of their respective holdings, while leaving each party free to make such compensation to the other as may be considered just.

Partly through the influence of this law and partly because of the continual difficulties caused by the excessive subdivision of land, there is now a tendency daily becoming more general among the more intelligent cultivators in Bulgaria towards a friendly readjustment of their respective holdings. The Government will not long be able to ignore this spontaneous movement, and it is probable that the day is not far off when the question will be regulated by a definite legislative measure. The greatest obstacle to the development of rural economy in Bulgaria will thus be eliminated.

## BRITISH INDIA.

### CANAL COLONIES IN THE PANJAB.

By Sir JAMES DOUIE, K. C. S. I.

The Panjab is in the main a country of small peasant proprietors. This is especially true of the eastern and central districts in which a normal family holding consists of from five to ten acres. Two grave economic evils beset agricultural ownership in such small parcels, namely, the reduction of the size of holdings below an area sufficient to support a family in decent comfort, and the transfer of land to money lenders. The latter is one of the causes which produce the former. But a holding which is quite unburdened may be subject to *morcellement* by the operation of the rule of inheritance under which sons on their father's death each take an equal share of the family property.

A generation ago pressure on the soil was a matter of apprehension. The census of 1881 had directed attention to it, and no one could then foresee how completely the position would be changed by the ravages of plague which invaded the province in 1897. The fact that there were vast areas of uncultivated State land to be commanded by the canal projects for the irrigation of the tracts between the Ravi and the Chenab, and the Chenab and the Jhelam, seemed an admirable means of combating a growing social and political danger by schemes of colonization. The second evil has been met by an Act, XIII of 1900, putting severe restrictions on transfers to non-agriculturists, and since 1904 by the organization of village banks. A perception of the dangers to small holders of unrestricted transferable ownership determined the rights which the Government was at first prepared to concede to settlers in the canal colonies.

#### § 1. AGRICULTURAL CONDITIONS IN THE PANJAB.

The broad plain of the Panjab, which supports a population of nearly 20 million souls, covers roughly an area of 90,000 square miles. It may be divided into four agricultural zones.

- (A) The South East (5 districts);
- (B) The North West (4 districts);
- (C) The Submontane and Central (9 districts);
- (D) The South West (9 districts).

The third is the richest and most densely peopled part of the province. Though it occupies but one fifth of the area and is the tract which has paid the heaviest toll to the plague demon, it had still in 1911 much more than one third of the total population. It was here that thirty years ago pressure on the soil seemed likely to become formidable.

The thinly populated South Western Zone, lying south of the Sult Range and west of the Sutlej, with the same number of districts occupies half of the total area. It is in this zone that the great developments of canal irrigation have taken place in the past thirty years, and that the schemes of colonization have been carried out. The South Western Panjab is a region which the monsoon currents only reach in a very feeble fashion. It is a part of the great desert which extends from the Western Sahara to Manchuria. But for its rivers fed by melting Himalayan snows it must have been destitute of crops or of any settled population. Over the greater part of it the rainfall is less than 15 inches in the year, in the extreme south-west it falls below 5 inches. The *Bar* tracts, as the Uplands between the Ravi and Chenab, and the Chenab and Jhelum are called (1), consist for the most part of firm loam, not so rich as some of the submontane soils, because containing little humus, but still, when water is obtainable, of great natural fertility. It is these Bars which the engineers have made fit to support in comfort large and flourishing communities of peasant farmers.

When the British Government annexed the South West Panjab in 1849 and for many years after cultivation was practically confined to the river valleys, where the people had supplemented the effects of flooding and percolation by wells and small inundation canals. These rough works had no masonry heads. They ran for a few months in the monsoon season and carried the river water into parts of the valley which floods failed to reach. They could not penetrate into the Bar Uplands, and the water level there was so deep that well cultivation of any value could not exist. A few scattered wells were intended mainly for the watering of the cattle of nomad grazers. Dry cultivation was only possible in natural hollows. Here and there, especially in the north, an isolated village was met with, but the Bars were the home of a roving population of graziers and camel owners having their head quarter in huts clustered round some old well or natural depression. The greater part of these vast wastes were State property.

The native Governments to which the English served themselves heirs claimed large powers of disposing of the waste, whether included in the somewhat uncertain boundaries of villages, or consisting, as in the South Western Panjab, of vast tracts covered with scanty scrub. When the Western Panjab was annexed Lord Dalhousie ordered waste in which there was practically no settled population to be marked off as State property when village boundaries were determined, and directed attention to the adoption of measures for planting on it an agricultural population. The tendency of the British Government has been to withdraw from all inter-

(1) See map.

ference where a community could assert any reasonable proprietary claim. Such villages as existed in the Bar Uplands cannot be said to have had any boundaries. The Governments laid them down so as to include in each a very ample grazing area. It was hoped that the enforcement of law and order would lead to the conversion of much of this into arable land. But the physical conditions forbade it till canal irrigation became available, and the great Bar villages continued to be peopled by tribesmen whose main occupations were cattle rearing and cattle lifting. Outside village boundaries the waste was recorded as the property of the Government.

## § 2. IRRIGATION AND COLONIZATION.

From 1850 to 1885 leases of State land on favourable terms were offered to persons who were prepared to sink wells. The results were small and colonization only became a serious factor in agricultural development when the policy of developing canal irrigation in the south west of the province was undertaken.

The three great canals in existence in 1885, the Western Janna, the Upper Bari Doab, and the Sirhind, served tracts where rain cultivation is possible, and the function of wells and canals is to enable farmers to grow a better class of crops and obtain a heavier and more certain yield. Such a country was occupied by village lands and there was no opportunity for State colonization. The Upper Bari Doab Canal is a partial exception, and some colonization has been carried out on lands commanded by extensions of that work in the Lahore district. The two tables below show the canals on which colonization has been or will be carried out.

TABLE I. -- *Colonization carried out.*

Name of Canal	Kind of Canal	Date	Commanded area			State land		
			Total	Culturable	Total	Allot-able area	Culturable and irrigable	Allot-able
			acres	acres	acres	acres	acres	acres
Siddnai . . . . .	Inundation	1886-1889	381,000	344,000	232,000	—	—	177,000
Sohag-Pura . . . . .	Inundation	1888-890	—	—	86,000	—	—	70,000
Lower Chenab . . . . .	Perennial	1890-1900	3,360,000	2,768,000	1,476,000	1,443,000	1,825,000	1,841,000
Upper Bari Doab . . . . .	Perennial	1894-1904	—	—	91,000	85,000	79,000	81,000
Lower Jhelam . . . . .	Perennial	1897-1904	1,308,000	1,162,000	476,000	500,000	476,000	402,000
<b>Total . . . . .</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>3,461,000</b>	<b>—</b>	<b>—</b>	<b>2,572,000</b>

TABLE II. — *Colonization in hand or proposed.*

Canal	Acres
Lower Bari Doab . . . . .	1,192,000
Upper Chenab . . . . .	78,000
Upper Jhelam . . . . .	48,000
Total . . . . .	1,318,000

A perennial canal is one in which, by the construction of a masonry weir at the head, a supply of water is maintained throughout the whole year. The beds of the Sohag-Para and Sidhni are dry for a large part of the winter. These two works, though insignificant in themselves, are important in connection with the story of colonization in the Panjab. It was on them that the first experiments were made, and the principles and procedure then laid down proved in the main sound when applied on a vastly larger scale.

### § 3. THE FIVE GREAT PERENNIAL CANALS.

It will be well to give in the briefest space a few facts about the five great perennial colonization canals, the excavation of which has been carried out in the past 25 years.

The first to be taken in hand was the Lower Chenab Canal. The commanded area is  $3\frac{1}{4}$  millions of acres, three fourths of which was State land. It irrigates  $2\frac{1}{4}$  millions of acres yearly, and without the canal practically the whole of that large area would be lying waste. The supply is secured by a weir built across the Chenab River at Khanki and completed in 1892. The capital expenditure has been a little over £2,400,000, and in recent years the interest earned has averaged 28 per cent.

The Lower Jhelam is also a great canal, though small in comparison. More than half of the commanded area is included in the boundaries of old estates, and the area available and fit for colonization did not exceed 50,000 acres. Irrigation was started in 1911. The average area watered is about  $\frac{3}{4}$  of a million acres, and the interest earned exceeds 10 per cent.

The other three canals form branches of a bold scheme known as the Triple Project. The Chenab river has been tapped by means of a great weir at Merala in the Sialkot district, and the water will be used to irrigate

(a) a large area west of the Ravi in the Gujranwala district and

(b) a much larger area east of the Ravi in Montgomery and Multan.

The second object is by far the more important. To effect it the canal is carried over the Ravi by an aqueduct. The main channel and its distributaries in Gujranwala are known as the Upper Chenab Canal. West of the Ravi it becomes the Lower Bari Doab Canal. The withdrawal at Merala

of a large part of the Chenab water must affect the supply at the head of the Lower Chenab Canal further down stream at Khanki. To remedy this the bold idea was conceived of throwing the surplus water of the Jhelam into the Chenab above Khanki. This is the *raison d'être* of the Upper Jhelam Canal, though it will also irrigate a considerable area.

Nothing more need be said about it or the Upper Chenab Canal. The areas they command are mostly already parcelled out in village estates and from the point of view of colonization they are unimportant.

The case of the Lower Bari Doab Canal is wholly different. The area of State land available for allotment which it commands is estimated at 1,192,000 acres. The area which it will water yearly will be about 900,000 acres. These five canals will have between them a wheat area exceeding that of England and Wales.

#### § 4. THE PRINCIPLES OF CANAL COLONIZATION.

When colonization was first mooted the Panjab was fortunate in the officers responsible for its revenue and agricultural administration.

Mr. (now Sir James) Lyall was at the head of that department and his principal subordinate was Edward Wace. The former had a very intimate knowledge of the peasant farmer and his ideas and the power of grasping the broad features of any successful scheme of land settlement, the latter was a master of detail with a special acquaintance with land surveys and land records.

In 1882 the intention was to dig four inundation canals, one from the Ravi, one from the Sutlej, and two from the Chenab. The small Siddha Canal was dug from the Ravi in Multan, and the Lower Sohag-Para from the Sutlej in Montgomery. The Chenab scheme was superseded by a project for a great perennial canal.

Writing in 1883 of the Chenab Canal Project in its original form Mr. Lyall said:

"An attempt should be made to establish estates owned by bodies of peasant proprietors. In the Eastern part of the Panjab and in the sub-Himalayan tracts there not infrequently are found villages peopled by agriculturists of the best type, who have increased in numbers until the land which they own are insufficient for their support; often the owners of such estates have been accustomed to cultivate as tenants in neighbouring villages. But, owing to the owners of those villages now requiring the land for themselves (they) are gradually being ejected... It would improve the general condition... if some of the proprietors would emigrate to other countries... A number of men of this class might be induced to settle in the Gujranwala Bar by being allowed to migrate in bodies... formed by themselves, and by the promise on certain conditions of grants of land.

"The experiment might be tried in the following way... Go to place in the thickly populated districts, where groups of adjacent villages are

owned by men of the same clan, and... search among them for men of some amount of enterprise, capital, and influence, and ask such men... to lead own bodies of men of their own clan to the Government lands irrigated by the canal. Well selected blocks would be made over to the bodies so migrating. The leader of the colony would be given an interest in its success not only by receiving a share in the proprietorship but also by his being made headman of the new estate".

This passage contains the kernel of all the great schemes of colonization.

About the same time Edward Wace had introduced a new method of Cadastral survey by which each estate was divided into a number of squares, on to which were plotted the fields of all shapes and sizes of which an ordinary Panjab village consists. He saw that such squares would form excellent units for the allotment of holdings in new Colonies. If the evils which existed in congested villages from which settlers were drawn were of speedily to be reproduced in new estates, clearly holdings must be of substantial size. Further each man's allotment should consist of a single block of regular shape, and so well adapted for irrigation. A square of 7.8 acres was not too large for a holding, in fact in the earliest schemes the individual allotments consisted of several squares.

In the central districts the people have grouped themselves in well organized village communities. A village is often owned by people of one clan. Their houses and those of their dependents occupy a central site. The cultivated lands are held in severalty. There is always some common property, and, till the advent of orderly rule led to a rapid extension of tillage, there was often a large common waste. Big owners are rare, and, though a good deal of land is in the hands of tenants, some of whom enjoy a permanent tenure known as "occupancy right", the normal holding is mostly tilled by the peasant owner and his family with the help of some of the village menials. In the S. W. Panjab matters are different. Tillage depended on artificial means of irrigation, and the expenditure of capital in providing it became the best of titles. Hence the well holding, a small oasis in surrounding waste, became the natural unit of property. The village site was non-existent or unimportant. The cultivator found it more convenient to build his house and cattle pens beside his well. Estates were often mere groups of scattered wells owned by persons of different tribes, the only common tie being that of vicinage. Another difference is the existence of any landlord, big and little, cultivating through tenants.

The type of landholding which found favour in the projects for Canal colonies was that of the Central Panjab. In 1886 the Lieutenant Governor, Charles Aitchison, pronounced emphatically in favour of importing peasants who would till their own lands. At the same time local cultivators were to be given the chance of acquiring land.

To complete the subject of survey and demarcation, the 27.8 acre square was used on the Lower Chenab and Lower Jhelam Canals, but in the Triple Project a more convenient rectangle measuring exactly 25 acres was adopted. In 1894 a valuable reform was introduced by which each



large square was subdivided into 25 square fields. This substitution of survey fields of regular shape with permanent boundaries for irregular fields with possibly shifting boundaries was admirably adapted for irrigated tillage, immensely simplified land records, and made any future subdivision due to inheritance etc. extremely simple,

#### § 5. THE FIRST EXPERIMENT IN COLONIZATION.

The first experiments in colonization were made on the two inundation canals, the Sidhnai and the Lower Sohag-Para. The initial step was to prepare contour maps of commanded lands, by the help of which the areas which could conveniently be served by separate water courses were defined. Village areas were made to coincide with water course areas, each being given its own channel. Each village was broken up into squares for allotment purposes.

Obviously holdings should be larger on inundation canals of intermittent flow, where canal water may have to be supplemented by well water than on perennial canals. But the adoption of 4 squares as the unit of allotment on the two small canals gave holdings of 90 and 111 acres respectively, and these were larger than were really required.

Under the leases given the grantees of land bound themselves to bring two-thirds of the areas allotted into cultivation in five years, after which they were entitled to acquire ownership with power of transfer by paying the small sum of four shilling an acre. It first seemed doubtful whether settlers from the Central Panjab would come to the inhospitable tract commanded by the Sidhnai with only the promise of water for part of the year and the certainty of being surrounded by a hostile local population. But in the autumn of 1886 some Tats from Amritsar came to stay, and soon the difficulty vanished. The natives of the district were not forgotten in the distribution. Only men of the farming classes and of decent character were brought from outside. As far as possible villages were allotted to bodies of men of one tribe, each coming under its own leader.

The immigration into the area commanded by the Lower Sohag and Para was on a much smaller scale. Most of the immigrants on both came from Lahore and Amritsar.

#### § 6. THE LOWER CHENAB CANAL COLONIZATION SCHEME.

The work on these small canals was planned by Edward Wace. He died before the larger schemes emerged. By 1890 the conversion of the Chenab Canal project into one for perennial irrigation was approved. The great canal commanded the Sandal Bar, lying between the Chenab and Jhelam and containing in addition to a few old village estates 2 ½ million acres of State land. The Colonization Scheme framed in 1890 by Denzil Ibbetson was marked by a union of large ideas and grasp of detail characteristic of the man. The aim of the policy adopted was:

- (1) to relieve the pressure upon the land in congested districts;
- (2) to colonize the new area with well-to-do small farmers, cultivating their own holdings with the aid of their families and of the usual *menads*.

Sir James Lyall, who was now Lieutenant Governor, remarked that: "It seemed essential to preserve the tradition of the Panjab as a country of peasant farmers. No other general frame of society is at present either possible or desirable. The bulk of the available lands have heretofore been appropriated to *peasant* settlers... *Yeoman* grants are intended to attract... the men who, without attaining to the ranks of the higher gentry, are still well above the ordinary level of the peasant landowner. Naturally this class comprises some of the most intelligent and enterprising men in the agricultural community... Lastly an area has been reserved for *capitalists*... Capitalist farming is not a system suitable to the Panjab. But a moderate infusion of the capitalist element is not without its advantages. It supplies natural leaders for the new society. It gives opportunity to Government to reward its well-deserving servants, and to encourage the more enterprising of the provincial gentry. It attracts strong men who are able to command the services of considerable bodies of tenants."

Thus three kinds of grants were recognized, but probably less than one tenth of the available land went to yeomen or capitalists. Small areas were sold outright.

The peasant grant was usually of one square. Yeomen grants were of four or five squares (111 to 139 acres). Capitalist grants were of 6 to 20 squares (166 to 556 acres). In special cases the Government sanctioned larger grants. For peasants there was no fine on entry. But capitalists paid from 13 shillings to 27 shillings per acre, and yeomen 8 shillings, the latter sum being realized by instalments. Peasants were bound to reside on their grants and in later settlements the same obligation was imposed on yeomen.

If the conditions of the lease were fulfilled a yeoman and a capitalist could purchase on easy terms after five years, while a peasant could only acquire a permanent non-transferable right of occupancy. For this right no charge was made. The reason for only conceding a permanent right of occupancy was a desire to protect these small farmers from the pitfalls which beset the path of peasant owners. The conviction had forced itself on the minds of those who knew the people best that rural indebtedness and land transfer had become very serious questions. Ten years were still to elapse before, by the passing of the Panjab Alienation of Land Act, XIII of 1900, transfers to non-agriculturists became subject to severe legal restrictions and the risk of ownership proving a curse was removed. A few years ago there were political reasons for a reconsideration of the position. The disappearance from the rural economy of the province of ownership with unrestricted right of transfer had removed the objections felt in 1890. Finally it was decided to allow the peasant settlers to buy land worth anything from £8 to £15 an acre by the almost

nominal payment of 16s. 8d. an acre. It must be remembered, however, that many of them had already become entitled to a permanent tenancy which makes a considerable difference.

The enormous task of colonizing the Sandal Bar could not be carried out by the ordinary district staff. A special Colonization Officer was appointed, and the subordinate staff which he controlled became fairly large. The same policy was followed later on the Lower Jhelam and Lower Bari Doab Canals. The Colonies have been admirable training ground for the ablest of the younger Panjab officers. It was necessary to give them pretty free hand, the work was novel and important, and involved great responsibilities. While he was controlled from outside, the Colony Officer inside his Colony had to be a benevolent autocrat. Autocracy is tolerable when the autocrat is content to be also the servant of his people, and in this respect the Panjab officers did not show themselves lacking. The best known of them were Popham Young in the Lower Chenab Colony and Malcolm Hailey on the Lower Jhelam Canal.

The survey required before settlers could be introduced has already been noticed. Another necessary preliminary to successful colonization is the provision of railway communication. A good deal of suffering would have been saved if this had been arranged for beforehand in the case of the Lower Chenab Canal. The tract it serves is now traversed by several railway lines, which convey the enormous surplus produce to the sea board. But while colonization began in 1892, the construction of the first railway was only undertaken in 1895. The lesson had been learned when the colonization to the Lower Jhelam Canal was undertaken, and the tract to be served by the Lower Bari Doab Canal, where colonization is now in progress, lies directly on the route from Lahore to Karachi and has already been traversed by a railway.

Experience showed that allotment ought to have been preceded by a soil survey sufficient to discriminate between good land, mediocre land probably fit for distribution, and land which was not worth tillage. While the bulk of the land in the Sandal Bar was good, there was poor soil on the fringes, which might better have been left unallotted. That settlers were prepared to accept land was no proof that it could be tilled with profit. Land hunger was so keen that a man would take a square anywhere in order to get a footing and work up a case for an exchange later on. In doubtful cases the prudent course was to give land out experimentally for temporary cultivation. In the Lower Jhelam Canal Colony a soil survey of the squares was made before allotment. But there too water courses were carried into land which was not worth irrigating, and the estimate of the available area had to be revised.

The selection of peasant colonists was entrusted to Deputy Commissioners (1) and Settlement Officers (2), the locating of the colonists on the

(1) The Deputy Commissioner is the official head of a district.

(2) The land revenue of each district is reassessed at intervals of 20 or 30 years. The officials who carry out the delicate duty are Settlement Officers.

land and the charge of their future welfare was the task of the Colonization Officer.

The choice of colonists was limited to five tribes noted for their agricultural efficiency. They were to be drawn almost entirely from seven districts which were considered to be congested, Ambala, Hoshiarpur, Gurdaspur, Sialkot, Amritsar, Jalandhar and Ludhiana. These form a solid block extending from the low hills into the central plain. Most of the colonists belonged to the two great tribes of Jats and Arains. There were some undoubted advantages in restricting the choice to the most industrious tribes, but it seems doubtful whether in fact it would not have been wiser to draw other fish into the net.

On the whole there was not much to complain of as regards the selections made. Amritsar furnished many colonists, and here the work was in the hands of a very able Settlement Officer, J. A. Grant. He adopted an admirable method, which may be described in his own words:

"When I had fixed on a village as one from which I would be likely to obtain a good number of settlers... an order was sent to the *patwari* (1) to be in attendance on a day named to supply verbally the required details as to land owned. I used to find it convenient to halt a day at the village, and the evening before to call up the headmen of the village to explain to them the terms on which the land would be given. They were at the same time warned that any deceit or personation would be punished by my refusing to give any land to that village... Then they would be sent to talk it over until the next day, when all the would-be settlers came up in a body. These I would first separate into *pattis* (or wards) and make the men of each *patti* sit in a long row, the fathers next their sons, and brothers next one another.

"Walking down this row I could easily see the men who were physically unsuitable. Many old dotards and mere boys would be brought up in the hope of thus securing an extra square for the family... His colour would often betray the habitual opium-eater, and his general appearance (more especially his hands) the *shaukin* (2). A show of hands is a simple method of discovering the real workers... Next, if any one family was represented by too many members, one or two of these would be weeded out amid loud protests... Then with the *patwari* and a *mumshi* (3) at my elbow, and attended by the headmen of the *patti*, I would go down the line and take down the name and the area of each man's share, his age, parentage and *got* (4). This process would expose those who already had sufficient holdings or who had mortgaged a considerable share of their land, and these, too, were weeded out. The residue would be put down for a square each, with perhaps an extra square for the man who, by common consent, was named the leading man of the *patti* — the bell-wether whose lead all would follow. Thus

(1) Village accountant.

(2) Dandy.

(3) Native clerk.

(4) Subdivision of a tribe.

the original crowd of applicants would be reduced to a band of men all connected by common descent, all physically fit to take up a life in a new country under considerable difficulties, all hard up for land, but with sufficient resources to start them. All enquiries would be made publicly at the time of selection, and verbally."

As on the Sidhni, so on the Lower Chenab Canal the first steps were difficult. There was no railway, the nomad cattle thieves were hostile, prolonged drought had made the Bar more than usually desolate. Many colonists returned to their houses in despair. Those who remained and survived a severe outbreak of cholera reaped an excellent harvest from the virgin soil. The period of trial was a short one, and soon the demand for land among the peasants of the central and submontane districts became very keen, and has continued so ever since.

Probably the Lower Chenab Canal Colonization Officers between 1894 and 1906 had to deal with from 40 to 50 thousand selected immigrant peasants besides a host of clamorous applicants who besieged their gate without credentials. All the settlers from one Amritsar or Gurdaspur village were put into a single colony village.

The most suitable size for a new Estate was about 1,800 acres: 20 per cent. of the area was reserved as common pasture, and further reservation had to be made for the village site, etc. An ordinary village therefore contained from 40 to 50 allotment squares. If this was more than was required for one group of immigrants, another group, which could fit in well with the first, had to be put in the same estate. It then consisted of two wards, and usually each ward had its separate headman.

The Colonization Officer was by no means done with the colonist when he had sent him to the village with the slip of paper which indicated the square of which he was to be given possession. The Oriental believes that it is the duty of his ruler to be his "father and mother." The Colonization Officer had to listen to every complaint reasonable or unreasonable. If the irrigation arrangements were working badly he had to approach the Canal Officer. If a settler had fair ground for dissatisfaction with the square first allotted, he had to try to arrange for an exchange. He selected the land for the village site and insisted on its being laid out after a regular pattern with broad roads, commodious house sites, and fixed places outside for the deposit of manure.

His fatherly discipline included the enforcement of sanitary practices: the sinking of a drinking well and the planting of trees. Those who are acquainted with cramped and dirty sites in old Panjab villages will sympathize with his efforts. But it is quite likely that in the desire to make the colony a model settlement regulation was pushed too far. The later policy has been rather to pursue the same ends by less direct means, e.g. by making the insanitary state of a village a reason for deferring the sale of proprietary right.

The dratting of industrious peasants into the colony has from the economic point of view been a great success. A desert has been converted into one of the most prosperous of Panjab districts.

The arrangements for the location in separate villages of the nomads of the Bar were not ungenerous. They are a manly race and have proved so satisfactory both as cultivators and as citizens that it is matter for regret that even more was not done for them. Their villages are models of neatness and cleanliness.

Special grants to camel owners subject to a condition binding the grantee to maintain camels for military transport service were made later. The difficulty of working them successfully has been great, and economically they have been far less satisfactory than the ordinary grants.

A perception of the weakness of a society without natural leaders was probably behind Sir James Lyall's plea for a considerable admixture of yeoman and capitalist holdings. But his intentions were never really carried out. The grants were in fact used to a considerable extent as additional pensions to deserving native officials with no regard to their fitness or unfitness for country life. The pensioned hospital assistant or district judge was usually a townsman, and his sole interest in the colony was the collection of his rents. Even when genuine agriculturists were selected, they were naturally men who were doing useful work in their own districts. They had no wish to leave and their Deputy Commissioner preferred to keep them. Hence a clamour for exemptions from residence and wholesale absenteeism with or without leave. It is impossible to deny that from the standpoint of economics the peasant grantees proved far superior. But one cannot look without apprehension on a social chess-board on which all the pieces are pawns, and it is to be hoped that in time the more thrifty and energetic will become knights or castles.

The progress of allotment is shown in the following statement :

TABLE III. — *Lower Chenab Canal Colonization Scheme:  
Progress of Allotment.*

Period	Rakh Branch. Acres	Jhang Branch. Acres	Gagera Branch. Acres	Total. Acres
1892-95 . . . . .	421,000	—	—	421,000
1896-98 . . . . .	431,000	390,000	—	821,000
1899-1904 . . . . .	451,000	560,000	780,000	1,809,000
1905-1912 . . . . .	456,000	575,000	808,000	1,839,000

The work was practically completed in twelve years. In 1911-12 the colonists sowed 1,912,000 acres of crops. It is well that nearly 2 million acres should have been brought under tillage, but it is certainly regrettable that in a tract where manure is not largely used and which is copiously irrigated there should be no fallows. The best of land will not stand continuous cropping under these conditions, and canal engineers have

had painful experience elsewhere of the evil of water logging. It was intended that only three fourths of each holding should be irrigated every year. But in practice we have not yet succeeded in enforcing that wise restriction.

Nearly four fifths of the colonized area is in what has been constituted the Lyallpur district. It may be doubted whether in 1891 its population exceeded, 1,000 or 2,000 souls. Twenty years later the number was 857,711. Two railways passing respectively through the district unite in its south western corner with a third, which serves the Lower Jhelam Colony. They are the means of carrying an enormous export of wheat and oil seeds to Karachi. Roads have been constructed, avenues of trees planted, and the district is one sheet of cultivation. The capital is at Lyallpur, which in 1911 had a population of 19,598 souls. In addition market towns have been established at other points on the railways. The sites were located on Government land. There was careful planning, demarcation of roads and of sites for shops, dwelling places and factories. The sites were sold and the proceeds devoted to the expenditure required to lay out the town on sanitary lines. The administration of Lyallpur was some years ago assimilated to that of an ordinary district.

#### § 7. THE LOWER JHELAM CANAL COLONIZATION SCHEME.

The tract irrigated by the Lower Jhelam Canal contains a large area of excellent land. The colonization work is practically finished. Its progress is shown below.

TABLE IV. — *Lower Jhelam Canal Colonization Scheme : Progress of allotment.*

Period	Acres allotted
1902-04 . . . . .	148,000
1905-07 . . . . .	348,000
1908-10 . . . . .	388,000
1911-13 . . . . .	403,000

The land is fully cultivated. In 1912-13 386,798 acres were sown.

The peculiarity of this colony lies in the fact that more than half of the available land has been allotted on horse-breeding conditions. In India military security must over-ride purely economic considerations. In parts of the Panjab horse-breeding is a favourite pursuit, and Government has done much to improve the country bred horse by importing stallions. Native cavalry has been able to obtain mounts in the country, but the horing of the heavier English cavalry has always been costly, as remounts from Australia had to be purchased. It was decided to make a big experi-

ment as to the possibility of breeding locally horses good enough for heavy cavalry. The settler would be required to keep a brood mare passed as fit for the purpose by an Army Remount officer. Government stallions would be kept at convenient centres, the young stock, when good enough, would be bought from the colonists at 10 months or under and drafted into a remount depôt, to be reared there till they were fit for service. The Mona Remount Depôt covers an area of nearly 10 square miles, and a similar area has been reserved for a mule run near Sargodha, the capital of the Colony. Native Cavalry regiments have been given allotments for stud farms and horse runs both in the Lower Jhelam and Lower Chenab Colonies.

The Colonization Scheme comprised:

(a) Horse-breeding Peasant Grants. As the grantee had to maintain a mare the size was 2 squares or 56 acres.

(b) Horse-breeding *Safedposh* (1) grants for men of higher rank, who would keep more than one mare. 1 ½ square per mare was allotted.

(c) Studfarms of the same class as (b) but of larger size.

(d) Peasant grants without horse-breeding conditions.

(e) Civil grants without horse-breeding conditions, corresponding to yeoman and capitalist grants on the Lower Chenab Canal.

In addition there were allotments for *Janglis* (2), for tree planting, for village head-men, and for menials. The last class consisting of sweepers, leather workers, blacksmiths, carpenters, etc., play a very important part in the rural economy of the Panjab.

In the Panjab Colonies Report for 1912-13 the distribution of the land is given as follows:

TABLE V. — *Lower Jhelam Canal Colonization Scheme :  
Distribution of the Land.*

Nature of Grant	Acres
Peasant horse-breeding . . . . .	194,702
<i>Safedposh</i> horse-breeding . . . . .	22,279
Studfarms . . . . .	6,754
Infantry grantees . . . . .	39,283
Civil grantees . . . . .	23,250
<i>Janglis</i> . . . . .	59,816
Village menials. . . . .	10,869
» headmen. . . . .	7,253
Tree planting . . . . .	3,595
Army Remount Depôts . . . . .	20,068
Regimental Stud Farms. . . . .	8,436
Proprietary . . . . .	6,540

(1) "Safed posh" (White robed) = gentleman.

(2) "Janglis" the original inhabitants of the Bar.



Here only 10 per cent. of the village area was reserved for grazing. A large common is not wanted where irrigation secures people against scarcity of fodder.

The peasant paid no entrance fee. He was bound to reside and could not alienate. If he brought half the area of his grant under tillage he was entitled after five years to permanent tenant right free of charge if he was a horse-breeder, otherwise on payment of 2s. 8d. an acre. The horse-breeding tenant had no reason to grumble at his obligation to sell young stock to Government, for the average price fixed was very liberal. It has been necessary in the case of these service grants to provide for devolution by the rule of primogeniture.

The *safedposh* grants were subject to much the same stipulations. An entrance fee was charged. Residence might be excused. Primogeniture was applied to all the service grants and to all the ordinary grants exceeding 4 squares.

On the whole the peasants have proved good horse-breeders, but the larger grants have often been failures. A fair supply of good remounts has been obtained, and the horses which are not good enough for British cavalry are available for native regiments, which can also buy direct from the colonists. The number of brood mares in the Colony is probably about 3,500. The working of the scheme is shown in the annexed table:

TABLE VI. — *Lower Jhelam Canal Colonization Scheme:*  
*Results of the Horse-Breeding Grants.*

Year	Foals born	Percentage of successful coverings	Purchases		
			British Cavalry	Native Cavalry	Total
1904-05 . . . . .	563	37.8	128	6	134
1907-08 . . . . .	1,756	55.5	579	148	727
1909-10 . . . . .	1,668	42.5	489	145	634
1910-11 . . . . .	1,836	47.4	369	103	472
1911-12 . . . . .	1,870	47.7	402	101	503
1912-13 . . . . .	1,646	47.5	374	122	496

A few years ago there were circumstances which led the people to think that Government would not insist strictly on the fulfilment of the conditions, and this appears to have given the scheme a set-back, which it may be hoped will be temporary. Service conditions have hampered the agricultural development of the Lower Jhelam Canal Colony. The number of colonists has been limited by the necessity of giving the horse-breeder two squares instead of one. Primogeniture is foreign to the ideas of the Panjab peasant. A man's sons will not unite whole-heartedly in

developing a grant if the eldest son is finally to reap the fruit of their labours

At first nature seemed to conspire against this Colony. There were virulent outbreaks of plague in 1904 and 1907, and in 1905 the spring crops were injured by frosts and the cotton crop destroyed by boll-worm. But neither the handicap of service conditions nor natural calamities have prevented the success of the settlement, which has converted 400,000 acres of waste into a well cultivated plain and provided a comfortable livelihood for thousands of peasants. These people have been largely drawn from North Western districts, and as a rule profess the faith of Islam. The proportion of land included in old proprietary estates is much larger on the Lower Chenab Canal. The old landowners are Muhammadans, and it is just as well that their new neighbours should be their co-religionists. Service conditions make it difficult to allow the tenants to acquire ownership.

#### § 8. THE LOWER BARI DOAB CANAL COLONIZATION SCHEME.

When the Lower Bari Doab Canal Colonization Scheme was drawn up there was much past experience to draw upon. Clearly the larger grants had in no way served the purpose for which they were created, and service grants, however useful to the Army, were economically inferior to peasant grants. The special reasons which on the Lower Chenab Canal led Government to sell the proprietary right at a small fraction of its real value did not apply. In view of the eager competition for land and the evidence that had accumulated as to its value it was urged that, before finally parting with public property, the State was bound to demand a fair price. The days were past when to settle in a new colony involved any special hardship. Yeoman and capitalist grants were given up, and land grants to meritorious native officials were condemned. But 75,000 acres were reserved for grants of 125, 250, and 375 acres to members of the hereditary landed gentry. No condition of residence was imposed, and the recipients will generally fulfil the rôle of absentee landlords. Even so those who know the Panjab best will approve. The grantees, if they seek to acquire ownership, will get the same terms as ordinary peasant settlers. But to get land at all in a colony, is now looked on as a valuable privilege. The capitalist or retired public servant will have the opportunity of bidding for land at auctions, as it is proposed to sell in this way an area of 125,000 acres.

An attempt has been made to retain the military advantages of service grants while avoiding their economic defects. An ordinary allotment will consist of one rectangle of 25 acres. If the grantee fulfils the conditions he will be given permanent tenant right after five years. He can convert this five years later into ownership by paying the market value as deduced from auction sales less a percentage which had not been determined when

the scheme was sanctioned in February 1914. The purchase money may be paid in instalments extending over 30 years. Till it is paid the settler remains a tenant paying a rent of rs. 4d. an acre in addition to charges for water rates, land revenue, and cesses which owners pay. These holdings descend on the grantee's death to his sons in equal shares.

Most of the new estates will also contain a certain proportion of 7,000 "service" rectangles with a total area of 175,000 acres. 5,000 will be held on condition of maintaining a brood mare for horse-breeding and 2,000 on a like condition for mule breeding. The total area of the estates containing service rectangles will be 680,000 acres. No one will be allotted a service rectangle who has not already got a rectangle on ordinary terms. The settlers most likely to be efficient horse-breeders will receive a service rectangle in addition. The competition for these extra rectangles will be keen. Government will not part with ownership. They will be given on lease, but probably for an indefinite term, and the lessee who fulfils the conditions will run no risk of ejection. It will be necessary on the death of the lessee to admit only one of his heirs as successor. But the existence of the family rectangle gives other sons a permanent stake in the colony.

Of this area of 680,000 acres there will be put at the disposal of the Commander-in-Chief 103,000 acres for deserving native soldiers. A similar plan was followed in the Lower Jhelam Colony, the selection of military colonists by the civil authorities, as was the rule in the Lower Chenab Colony, having proved a troublesome business. Settlers for the rest of the area will be obtained locally from the two districts, Montgomery and Multan, served by the canal, and from other western and west-central districts. But in addition, villages with an area of 80,000 acres will be reserved for peasant settlers of the best agricultural tribes from the crowded districts of Amritsar, Gurdaspur, Hoshiarpur, and Jalandhar. These men will not be horse-breeders, but it is hoped that their farming will be a pattern to the less expert peasantry from the western districts. The full proposals are shown below.

TABLE VII.—*Lower Bari Doab Canal Colonization Scheme :  
Distribution of the Land.*

Object	Acres
(a) Sale by Auction . . . . .	125,000
(b) Hereditary Landed Gentry. . . . .	75,000
(c) Peasants in villages containing horse and mule- breeding rectangles (1) Service . . . . .	125,000
(2) Balance . . . . .	555,000
(d) Peasants from congested districts. . . . .	80,000
(e) Depressed classes . . . . .	30,000
(f) Compensatory grants and grants to men who have lost land by river action . . . . .	40,000
(g) Regimental Horse farms, Agricultural and Private Breeding Farms, etc. . . . .	100,000
(h) Forests. . . . .	40,000
(i) Reward Grants and Reserve. . . . .	22,000
Total . . . . .	1,192,000

## § 9. THE VALUE OF COLONY LAND.

Rough estimates may be given of :

(a) the value of Colony land, and

(b) the yearly income which the State derives from it.

The result of auction sales is shown below.

TABLE VIII.—*Auction Sales of Colony Land.*

Colony	Year	Acres	Average Price £. s. d.
Lower Chenab . . . . .	1892	8,793	2 17 0
Upper Bari Doab . . . . .	1893	10,012	3 8 0
Lower Chenab. . . . .	1894	5,107	8 19 0
Lower Chenab. . . . .	1900	9,013	7 7 0
Lower Jhelum. . . . .	1902	4,783	10 4 0
Upper Bari Doab . . . . .	1905	1,142	17 12 0

In August 1913 land was sold on the new Upper Chenab Canal at an average price of £ 15 2s. 8d. an acre. Putting it moderately, agricultural

land in a colony in its unreclaimed state is now worth £10 to £15 an acre. The following figures illustrate the rapid rise of the renting value of land on the Lower Chenab Canal :

TABLE IX. — *Rental Value of Land on the Lower Chenab Canal.*

Year	Jhang Branch I		Jhang Branch II	
	Acres	Average Rent	Acres	Average Rent
1902-03. . . . .	2,612	8 shillings	4,385	7 ½ shillings
1908-09. . . . .	9,446	12 shillings	15,264	10 shillings
1909-10. . . . .	12,283	13 shillings	16,875	11 shillings

Some addition should be made on account of charges properly payable by the landlord which he transfers to the lessee. Annual charges in the fully developed Lower Chenab Colony may be roughly estimated as :

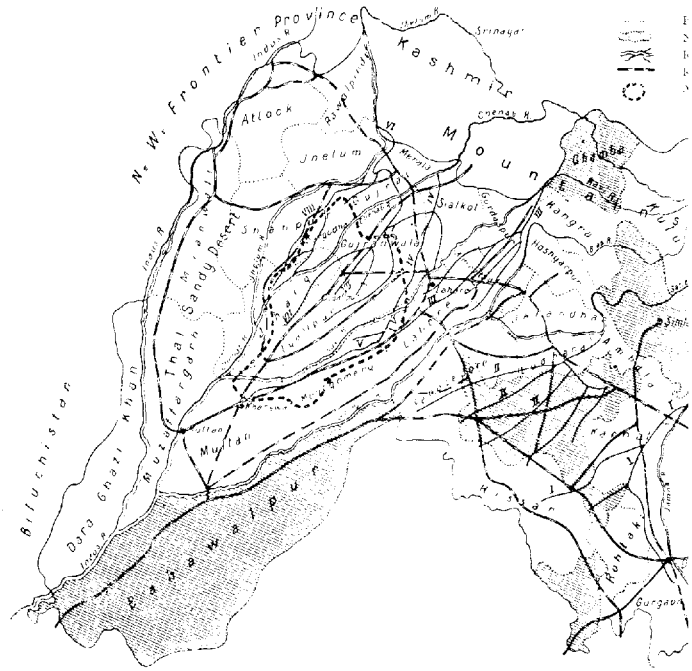
Water Rate . . . . .	4	to	5 ½ shillings per acre
Land Revenue . . . . .	2 ½	to	3 ¼
Cesses . . . . .	1 ½	to	1 ½
Total . . . . .	6 ¼	to	9 ¼

The water rates are very low as compared with those on the Egyptian canals.

\* \*

The colonization of canal lands in the Western Panjab has been a notable achievement. The problems to be faced have been novel and sometimes difficult. While mistakes have been made, it is nevertheless true that a great experiment is being steadily carried to a successful issue, and that the wealth and prosperity of the Panjab has been vastly increased thereby.

Sketch Map of Punjab.



CANALS.

- I. Western Jumna Canal
- II. Sutind
- III. Upper Bari Doab
- IV. Upper Chenab
- V. Lower Bari Doab
- VI. Upper Jhelum
- VII. Lower Chenab
- VIII. Lower Jhelum



## UNITED STATES.

### MISCELLANEOUS INFORMATION.

I. — SOME ATTEMPTS TO UTILISE SURPLUS TOWN LABOUR IN AGRICULTURE. — An article in the *Country Gentleman* of July 4th, 1914, describes the work of a number of agencies in New York which are helping, each in its own sphere, to solve the problem of providing labour for the farms; some by establishing town workers with a little capital of their own upon small farms in New York State, others by drafting unemployed town labourers into the country districts where there is a demand for their services.

The situation which agencies of the latter type are trying to adjust is one which may be found in some form in almost any country. There are at all times in New York City large numbers of unemployed, many of whom, it has been proved, are capable of performing useful work in agriculture. With the object of inducing suitable men to accept such work the Deputy Commissioner of Agriculture has opened a Labour Bureau or Exchange in New York. Here he interviews men who are willing to leave the city and work on farms; ascertains what experience if any they have of farm work; and endeavours to place each man in a position of some kind in the country.

It has been found that the men who make use of the Exchange belong to two principal groups. The first are the immigrants who were employed in agriculture in their own country and who are, therefore, likely to be worth a higher wage in agriculture than in any town occupation, since any work of the latter kind which they are capable of performing must necessarily be of the lowest type of unskilled and probably casual labour.

Unfortunately it is just those immigrants who are fascinated most by the bustle and excitement of the towns. Many of them have friends in inland towns, already engaged in unskilled work in factories or foundries, who take charge of them upon their arrival at New York; but there are always men who upon landing remain practically stranded in the city. The Exchange seeks out those men and tries to put them into touch with farmers seeking help who are willing to pay the railway fare to the farms.

The second class of desirable farm labourers is made up of the boys and young men originally from the country who have failed in the town.



Many of these are mere lads who have left the farms for the town at the first opportunity, who have tried one occupation after another without success, and who are ready to go back to the country where at least they are certain to find good food and a warm lodging. The lads are sent on to farmers who make application for help to the Exchange. The railway fare is advanced by the State and refunded by the farmer. Every effort is made by the Deputy Commissioner to select suitable help for each farmer who applies to the Exchange; but he points out that responsibility for the labour problem lies to some extent with the farmers themselves who sometimes fail to make proper provision for the welfare of the labourers they employ. The problem is largely one of seasonal labour, and the New York Labour Exchange does everything in its power to reduce the demand for such labour, trying in every case to induce farmers to make yearly contracts with their labourers and arrange the work so as to keep the men on the farm constantly employed. The officers connected with the Exchange try also to ensure that the farmers pay the men they employ the full market value of their labour. They fix \$300 a year, with a cottage free, as a fair wage for an experienced married man, and from \$18 to \$30 a month with board for an unmarried man.

The Exchange has occasionally sent batches of men into the country districts to seek for work, but as a rule it waits for applications from the farmers. Occasionally, too, the Exchange has extended its activity beyond the State of New York and sent skilled farm labourers into New Jersey, Connecticut and Pennsylvania.

One of the agencies which is contributing to the relief of the town by transforming poor town dwellers into farmers is the Jewish Agricultural and Industrial Aid Society. This Society administers a fund established twenty-five years ago by Baron de Hirsch, and the fund serves to finance the Baron de Hirsch Agricultural School at Woodbine, New Jersey. More than 900 poor boys drawn from the worst parts of large cities have received one or two year's training in practical agriculture at this school, and have passed on to situations on farms. In addition, the farm-labour department of the Society, during the six years it has been in operation, has found situations on farms for 3,578 men. The Society also makes loans to heads of families to enable them to acquire farms and settle permanently upon the land. Naturally the Society confines its activities to members of the Jewish faith.

Columbia University has also turned its attention to the problem of encouraging a movement from the towns with the object of counterbalancing the rural exodus, and has founded in New York City an institute under the direction of an agricultural specialist to provide short courses in agriculture for town workers. Professor Morgan, the Director in charge of this work, believes firmly that one year's instruction in agriculture followed by a year of supervised practical work on a farm is a sufficient training to fit men who have hitherto worked in towns for earning their living in agriculture. It is too early yet to speak of the results of his efforts, but

Professor Morgan is enthusiastic and sanguine, and the experiment of turning discontented town dwellers into farmers is likely to prove interesting.

\* \*

2. — **BANKERS' COMMITTEES ON AGRICULTURAL DEVELOPMENT AND EDUCATION.** — During the past few years the farmer and his problems have been very widely discussed in the United States, not only by persons who depend more or less directly upon agriculture for their living, but by business men, railway men, bankers and others whose interest in the farmer is indirect. The formation of County Development Committees, Country Life Committees and similar associations has enabled each of these classes to contribute in some degree to the progress of a movement which has for its objects the better organisation of agriculture and the amelioration of life in the country; but some three years ago American bankers took the significant step of creating special committees of their State Associations with the title of "Bankers' Committees on Agricultural Development and Education".

At the first Conference of delegates from these Committees held in October, 1911, seven States were represented. A year later the number of States had increased to twenty-three and at the present time there are about thirty-eight Committees in the country. At the end of 1913, with the object of making the work of the Committees more effective as well as more widely known, the bankers founded a weekly review which, under the title of the *Farmer-Banker*, appears to have met with considerable success as a farm paper.

The Bankers' Committees are intended in the main to act as propagandist bodies carrying on a campaign for the improvement of technical agriculture and for the better organisation of the whole farming industry. Their aim is to disseminate information gathered by the numerous agencies, official and private, already working on behalf of better farming; and to some extent to co-ordinate the work of such agencies. The bankers — probably with a good deal of reason — assert that the existing agencies for agricultural research and education have accumulated a vast amount of valuable information which, in spite of the efforts made to disseminate it, still remains to a large extent unutilised. They propose to make this information better known through the medium of their weekly paper and the proceedings of the separate State Committees and the Annual Conference.

In a pamphlet which bears the title "The Banker-Farmer Partnership" are indicated some of the questions to which the bankers intend to devote special attention. They include farm demonstration work, soil surveys, road improvement, vocational training in rural schools, the marketing of agricultural products and the question of agricultural credit.

The views of the bankers as a body upon the subject of agricultural credit might naturally be expected to carry exceptional weight, but un-

fortunately American farmers are disinclined *a priori* to accept the views of bankers upon banking. The farmers apparently argue that a scheme which is good for the bankers is necessarily bad for the farmers, overlooking the fact that the scheme may possibly be good for both. Briefly, the attitude of American bankers upon the question is that existing institutions, including in the first place the banks of the country but including also such agencies as building associations and life insurance companies, are capable of providing all the credit which can be usefully employed in agriculture. They admit that some modification of the existing system and of the banking laws as they now stand may be advisable; but they are opposed, in general, to the creation of new credit associations or institutions. Or perhaps it would describe their position more correctly to say that they are opposed to the creation of new credit institutions until it has been proved that existing institutions are incapable of meeting all the whole of the legitimate demand for credit for agriculture.

The bankers, however, have not made the mistake of using their Committees merely for the purpose of advertising their views on the question of credit. They are using them rather to combat the idea that the interests of the banker are antagonistic to those of the farmer, and at the same time to direct the serious attention of bankers throughout the United States to the importance of making a close study of the problem of financing the country's greatest industry, — agriculture.

(Summarised from the *Banker-Farmer*, Vol. I, Nos. 1-6, December 1913—May 1914.

\* \*

3. — FARM TENURE IN TEXAS. — The Census Bureau in the United States first gathered information regarding farm tenancy in 1880. At that time 37.6 per cent of the farmers in Texas were tenants, and the proportion of tenants has grown continuously until, in 1910, it reached 52.6 per cent. The movement is shown in the following figures relating to the occupation of farms:

	1880	1890	1900	1910
Owners and Managers . . .	62.4	58.1	50.3	47.4
Tenants . . . . .	37.6	41.9	49.7	52.6

Although the owners form less than half of the total number of farmers in Texas, they occupy and operate more than 60 per cent of all farm land. Owned farms, that is to say, are generally larger than rented farms. Owners and Managers together operate 79 per cent of all farm land, while tenants, though forming 52.6 per cent of all farmers, operate only 21 per cent of the total farm acreage. The difference is less marked, however, if we consider not total area of farm land but the area of "Improved farm land".

Owners operate 52.6 per cent of the improved farm land, tenants 44.5 per cent, and managers only 2.9 per cent.

Over 75 per cent of the farmers of Texas are native born white, about 8 per cent are foreign born white, and about 16 per cent are negroes. Of the white farmers only 49 per cent are tenants; of the negro farmers 69.5 per cent are tenants. Of all land in farms operated by white farmers, over 60 per cent was in farms operated by owners and about 20 per cent was in tenant farms. In the case of negro farmers 40 per cent of all land was under ownership while over 50 per cent was occupied by tenants.

It seems that the preference for ownership is stronger among foreign born than among native born whites; of the former, nearly 58 per cent are owners while only 49.5 per cent of the latter are owners.

The outstanding fact with regard to tenancy in Texas is its relation to cotton growing. In the cotton belt of the State the proportion of tenancy is 60 per cent and over. Although the percentage of tenancy is higher for negro than for white farmers it does not follow that a high proportion of negroes in the population of a particular region signifies always a high percentage of tenants. In the cotton counties of Texas, where tenancy is highest, the proportion of negroes in the population is comparatively low.

As a rule the proportion of tenancy is highest in those sections of the State where the price of land is highest, but there are important exceptions to the general rule. Galveston County has the highest average price for farm land in the State, namely 78 dollars per acre, yet the proportion of tenants is only 18.4 per cent. Robertson County has the highest percentage of tenancy, but the average price of land there is only 15 dollars.

The form of tenancy in Texas is predominantly share tenancy, and even the small proportion of cash tenancy, which exists seems to be declining. In 1860, the proportion of farms held under cash tenancy was 8.8 per cent; in 1900 it was 7.3 per cent; and in 1910 only 6.3 per cent.

(Summarised from the *Bulletin of the University of Texas*, No. 258).

\* \*

4. — THE RELATIVE GROWTH OF THE NEGRO POPULATION. — In view of the fact that an article on the "Social and Economic Progress of the Negro Farmer" appeared in a recent number of the *Bulletin* (1) it will be useful here to reproduce from the *American Economic Review* some information as to the movement of the negro populations between the first census in 1790 and the last census — the thirteenth — in 1910.

At the first census the negroes formed 19.3 per cent or nearly one-fifth of the entire population; in 1910 they formed only 10.7 per cent. During the whole period of a hundred and twenty years which separates the first census from the last the white population was shown to have increased

(1) *Bulletin of Economic and Social Intelligence*, June, 1914.

more rapidly than the coloured in every decade except two. Between 1800 and 1810 the whites apparently increased 36.1 per cent while the increase among the negroes was slightly greater, namely 37.5 per cent. Again, at the census of 1880 the increase shown among the whites was about 30 per cent against an increase among the negroes of 34.9 per cent. The results of the 1880 census were regarded by many white people with a good deal of alarm, and it was argued that emancipation of the negroes was leading inevitably to the swamping of the white population in the Gulf States. It must be noted, too, that in the decade between 1870 and 1880 there had been very little negro immigration while white immigrants had been numerous, so that the difference between the negro rate of increase and the white rate of increase appeared to be even greater than was shown by the census figures.

However the fears of the alarmists were soon dispelled. At the next census in 1890 it was officially reported that, while the black population had increased 13.5 per cent, the increase for the whites was no less than 27.7 per cent. Between one decade and another, that is to say, the rate of increase for the negroes had dropped from 34.9 to 13.5 per cent; and in the next decade, according to the census of 1900, it rose again to 18 per cent. Negro immigration and emigration during these years were alike inconsiderable and it is admitted that the fluctuations were not really so great as shown in the census results, that the enumeration had, in fact, been defective.

In 1870, the disorganised state of the country had prevented a satisfactory count of either race and, as society was most disorganised in the sections where the negroes were most numerous, the census enumerators had overlooked more negroes than whites, and the increase shown for the negroes between 1870 and 1880 was, therefore, too high. Again, in 1890, the census taking was badly done and, according to the writer in the *American Economic Review*, "In all probability the rate of negro increase between 1880 and 1890 was about 16 per cent rather than 13.5; and between 1890 and 1900, under 15 per cent rather than 18 per cent as reported".

Past experience makes it difficult to decide whether the official figures may be accepted or not, but if the census of 1900 was accurately taken there has again been a drop in the negro rate of increase, which is returned as 11.2 per cent.

Few if any of the states in which the negroes are relatively numerous have an efficient system of registration of births and deaths, and this deprives us of the only efficient means of checking the census figures. The writer whom we are quoting thinks that the true increase may have been about 14 per cent, i.e. some 3 per cent greater than shown in the census figures, and concludes, "Even if the census returns were inaccurate to that extent, certain very important results to which they point would be unaffected. It would still remain true that in the country as a whole the whites are increasing relatively faster than the blacks, and that their absolute increase is many times as great".

NOTICES OF SOME RECENT PUBLICATIONS RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

AUSTRIA.

ALMANACCO AGRARIO PER L'ANNO 1915 PUBBLICATO PER CURA DELLA SEZIONE DI TRENTO DEL CONSIGLIO PROVINCIALE D'AGRICOLTURA DEL TIROLO (*Agricultural Almanac for the Year 1915, published by the Trent Division of the Agricultural Provincial Council for the Tyrol*) Trent, 1914. Tip. Art. Trid.

The 1915 number of the Agricultural Almanac, published annually by the Trent Division of the Agricultural Provincial Council of the Tyrol, has just appeared. We have already had occasion in this Bulletin to point out the importance this publication has assumed in the course of the years. The compilation of the almanac for 1915 naturally has suffered by the war breaking out while it was in progress. There are fewer pages to be found. The annual is reduced this year to the proportions strictly necessary; but, in spite of this, it will yet be found of considerable utility, owing to the abundance of valuable statistics and other information it contains.

UNITED STATES.

TRIMBLE, (WILLIAM J.): THE INFLUENCE OF THE PASSING OF THE PUBLIC LANDS. *Atlantic Monthly*. pp. 755-767. June, 1914. Boston: The Atlantic Monthly Company.

Mr. William J. Trimble is Professor of History and Social Science in a North Dakota College and writes, in addition, with the fuller knowledge of agricultural conditions which only practical experience can give. His theme is the profound change which is being wrought in American life and in American ideas by the passing of the once vast public domain into private ownership.

After pointing out the extraordinary rapidity with which the public lands were occupied, the writer examines some of the moral and material results of this swift settlement. The material results were obvious. The output of the products of the soil, of the forests, and of the mines, was in-

creased at a rate unmatched in history; food and the other necessities of life were for a long time cheap and plentiful; population increased with amazing rapidity. The moral results were at first less evident; and they were mixed. The unstinted abundance yielded by the opening up of virgin lands bred and encouraged an over-confidence which often amounted to recklessness and resulted in speculation and waste. But the frontier life taught men to be self-reliant, hardy, resourceful and courageous and, above all, it taught them the doctrine of social and political equality. "Notwithstanding defects in our pioneer democracy" — writes the author of this article — "it was a genuine and sincere democracy; and it was so vitally connected with our public lands, that their passing raises profound problems touching the very existence of our democracy."

Mr. Trimble views the problems of the new era with a full sense of their gravity. Until now the people have spent with lavish prodigality the bounties provided by new lands and untouched stores of natural wealth. Now the time has come when the people may no longer waste; but must conserve. The law of diminishing returns, from now onward, will make it ever more and more difficult to win from the soil an increased production commensurate with the demands of an increasing population. The comparatively small area of public land still unappropriated is for the most part of inferior quality. There are no new fertile regions to be opened up to occupation. The real struggle has begun. It can only be won "at the price of more painstaking and enlightened methods, by continually bringing to bear fine and well-directed ingenuity, and by recreating, supplementing and hoarding our natural resources with the greatest care."

So much for the material problem. What of the moral problems of the new era? American democracy has been matured in a free-land era. How will it fare in an era of occupied land? With the passing of the public lands passes also the era of equality of opportunity; and with the passing of equality of opportunity passes also the tendency towards social and economic equality which was so strong throughout the free-land era. Nevertheless the writer does not fear for the cause of democracy. Political equality, he thinks, will survive and, in spite of the fact that America is entering of necessity upon a period of greater social control, through political equality will be won economic and social equality. Inevitably as life in America becomes more highly organised it becomes harder for the members of certain classes to retain complete economic freedom, but by complete freedom we mean not only freedom within the class but freedom also to pass from one class to another and a higher one. These classes claim — and claim justly — that if they are to be deprived of opportunity they shall at least be offered safeguards; and so arises the demand for legislation which is essentially protective — employers' liability laws, income and inheritance taxes, social insurance, the regulation of immigration, etc. These are the questions which American democracy has now to face. The writer does not suggest that they have arisen solely because of the passing of the public lands, but it is undeniable that while the free-land

lasted they were, as far as the United States was concerned, questions more or less academic.

With the passing of that era they become urgent practical problems.

#### GREAT BRITAIN AND IRELAND.

SCOTTISH LAND : RURAL AND URBAN. The Report of the Scottish Land Enquiry Committee. London, 1914. Hodder and Stoughton. 8vo. LV + 555 pages.

WELSH LAND : RURAL. The Report of the Welsh Land Enquiry Committee. London, 1914. Hodder and Stoughton. 8vo. XI + 387 pages.

We have in a previous number of the *Bulletin* (1) given some account of the Report of the Committee, consisting of representatives of the Liberal Party, which inquired into the land problem in England. This Report was published in two volumes under the title of "The Land. Vol. I Rural. Vol. II. Urban." Similar Committees were appointed to inquire into the land problem in Scotland and Wales, and the Report of the Scottish Land Enquiry Committee, embracing both the rural and urban aspects of the problem, has now been published, as well as the first part of the Report of the Welsh Land Enquiry Committee, dealing only with rural land.

Except that the holdings in Wales are smaller on the average than in England and that the physical conditions are different, the land problem in Wales does not present any very marked features which distinguish it from the corresponding problem in England, and the conclusions and recommendations of the Welsh Land Enquiry Committee do not greatly differ from those of the English Committee. One special recommendation, however, is that a separate Board of Agriculture should be established for Wales, the proposal being justified not only on grounds of nationality but on account of the differences between the two countries to which we have alluded.

In Scotland, on the other hand, there are special problems to be dealt with in regard to the crofters and to the large areas which have been converted into deer forests or are otherwise used for sporting purposes. Much has already been done to improve the economic position of the crofters and other small holders and an account of the efforts in this direction formed the subject of an article in a previous issue of this *Bulletin* (2). The Committee recommend various modifications of the present laws relating to small holders and urge that the protection which they give against arbitrary eviction and arbitrary renting should be extended to all farmers.

(1) *Bulletin of Economic and Social Intelligence*, June 1914, "Proposals for Land Reform in England and Wales."

(2) *Bulletin of Economic and Social Intelligence*, February, 1914: "Small Holdings in Scotland and the Effects of Recent Legislation Regarding them," by John M. Ramsay.



As to deer forests, they recommend that much of the land now utilised for this purpose should be made available for extending existing grazings of small holders and for creating new small holdings.

We shall treat these two Reports at greater length in an early issue.

MAC DERMOTT (THE REV. G. M.): *Agricultural Conditions in Norfolk*. "The Economic Review." London: October 15th, 1914.

Starting with the remark "Facts, facts, and still more facts — this is what is essential for a right apprehension of every social problem," the Rev. G. M. MacDermott makes a small contribution to the right apprehension of the English land problem by giving a few facts concerning the wages and conditions of work of agricultural labourers in that county of England with which he is best acquainted. His summary of the agricultural labourer's position in Norfolk is this: "He is well off while he is single; he can just manage to live when he has a wife and three or four children; but if he has a large family the struggle to make both ends meet is severe and most trying for both parents."

#### ITALY.

ANNUARIO DEI COMIZI AGRARI ATTIVI 1914. Consociazione dei Comizi Agrari Italiani. (*Yearbook of the Agricultural Comizi working in 1914. Association of Italian Agricultural Comizi*. Terni, 1914. Printed by Augusto Visconti. 50 pages.

This Yearbook, compiled by the meritorious *Consociazione dei Comizi Agrari Italiani*, gives lists of the Agricultural Comizi working in each region, with, in each case, the members of the board of management and the number of members of the comizio. We learn from this useful publication that on October 1st., 1914, the 129 agricultural comizi registered had altogether 25,416 members and there were 1,515 members on their boards of management, amongst which are to be found the names of the most experienced and intelligent farmers of every province.

LE MIGRAZIONI PERIODICHE INTERNE DEI LAVORATORI AGRICOLI (*Periodical Home Migrations of Agricultural Labourers*). Supplement to the *Bollettino dell'Ufficio del Lavoro*, No. 25. Ministero di Agricoltura, Industria e Commercio, Direzione Generale della Statistica e del Lavoro. Rome, 1914. Officina Poligrafica Italiana. 118 pages.

In this Supplement to the *Bollettino dell'Ufficio Nazionale del Lavoro* (Bulletin of the National Labour Office) are published the results attained by means of an enquiry carried out by the Labour Office into the prin-

cial migratory movements of farm labourers in 1913. Special consideration is given to the movements in connection with cleansing the rice plants and harvesting the crop. The total number of labourers emigrating towards the more important centres of rice cultivation was in that year, for the work of clearing, 50,261 persons (12,446 men and 37,815 women), and for harvesting 24,997 persons.

The report is accompanied by various tables which furnish most useful and interesting information in regard to the days during which the emigrants are absent and on which they work, the means of transport employed, the districts to which emigration is directed and finally the seasonal and daily earnings of the labourers.

#### SCANDINAVIAN COUNTRIES.

FROST (Dr. J.): Die innere Kolonisation in den skandinavischen Ländern. (*Home Colonisation in Scandinavian Countries*). Berlin, 1914. Paul Parey. 77 pp.

The work of the Scandinavian Governments in relation to home colonisation has been and still is very active, perhaps more so than that of other European States. These countries have a very sparse population, and the emigration from them is very considerable, and thus they contrast with other lands, the emigration from which is due chiefly to excessive density of the population. Urbanism is here also an important phenomenon, due both to the prosperity of commerce and industries and to the rapid disappearance of a whole class of farm labourers who were bound to the soil by contracts made for life (Husmaend, Torpare, etc.).

These factors make the work of home colonization necessary; and it is promoted by the three Governments on similar lines, although the different conditions of the several countries often lead to very considerable differences in regard to legislation. Dr. Frost examines the work of colonisation in Denmark, Sweden, and Norway, in turn. In a short introduction and in the conclusion, he notes the general characteristics of the three systems of legislation and points out their differences; finally, he notes the lessons that the other States of Europe, and especially Germany, may derive from a study of the home colonisation of Scandinavia.

#### SWITZERLAND.

EXPOSITION COLLECTIVE DES DÉPARTEMENTS CANTONAUX D'AGRICULTURE A L'EXPOSITION NATIONALE DE BERNE 1914. (*Collective Statement of the Cantonal Agricultural Departments for the National Exhibition at Berne, 1914*). 158 pages.

The essential portion of this publication may be divided into three parts, exclusive of the appendix. The first shows the expenditure supported by

the cantons in the various branches of agriculture, and especially in connection with agricultural schools and the attendance at them in 1912 and 1913-14, horse, horned cattle and goat improvement, farm improvement, the cultivation of plants, dairying, livestock and hail insurance and agricultural societies. The second part shows, with the help of statistical tables, the fluctuations in expenditure in connection with subventions for agriculture in the years 1880, 1890, 1900 and 1912; the material is subdivided into four parts relating to the expenditure for agricultural education, livestock improvement, farm improvement and subventions for other departments of agriculture; the fluctuations in the expenditure are summarised in a special table. The third part deals with the results arrived at.

The book concludes with a rich appendix containing the most recent agricultural legislation of the several cantons.

It is an excellent source of authoritative information in regard to the most various branches of Swiss rural economy.

